

Flight Plan

STS-129/ULF3

(L-35 FDO Trajectory)

**Mission Operations Directorate
Operations Division**

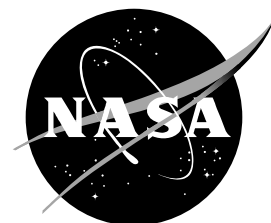
**Final
October 20, 2009**

**Launch Date: Thursday, November 12, 2009
Launch Time: 316/21:04:28 GMT
15:04:28 CST**

For the latest working copy of the Flight Plan, visit
http://modspops.jsc.nasa.gov/mod/DO/DO4/Joint/129_ULF3/default.aspx

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas



Verify this is the correct version for the pending operation (training, simulation or flight).
Electronic copies of FDF books are available. URL: <http://mod.jsc.nasa.gov/do3/FDF/index.html>

MISSION OPERATIONS DIRECTORATE

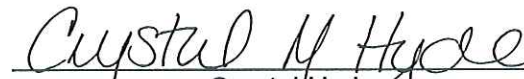
**FLIGHT PLAN
STS-129**

FINAL
October 20, 2009


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Lead RPE	DO4/M. Dunivan	281-244-1114

FLIGHT PLAN
STS-129

LIST OF EFFECTIVE PAGES

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* – Omit from flight book

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INTRODUCTION

The STS-129 Flight Plan is the Flight Data File article that contains the on-orbit timeline. It does not contain the detailed timelines that are covered in the Ascent, Post Insertion, Deorbit Prep, and Entry Checklists. The detailed rendezvous and undocking timelines and procedures are contained in the Rendezvous Checklist. The detailed EVA task timelines and procedures are contained in the EVA Checklist.

This Flight Plan satisfies the mission requirements specified in the following documents:

- NSTS-07700 Vol III, Flight Definition and Requirements Document
- NSTS-17462-129, STS-129 Flight Requirements Document
- NSTS-37326, Shuttle Crew Scheduling Constraints
- NSTS-21545, ISS-ULF3 Mission Integration Plan

The timeline formats used in this Flight Plan are based on JSC-19933, Timeline Format Definitions and Standard Notes, Rev C, May 1990.

The STS-129 Flight Plan is based on a launch date of November 12, 2009, at 21:04:28 GMT (03:04:28 PM CST). Orbiter inertial attitudes are expressed relative to a mean of 1950 (M50) reference frame.

The following SCSC Exceptions have been submitted in order to meet Category 1 objectives:
None

The Flight Plan and previously published, non-flown sections listed below are available on the following Space Shuttle Flight Planning web site:

http://modspops.isc.nasa.gov/mod/DO/DO4/Joint/129_ULF3/default.aspx

Non-flown sections that are no longer published:

- ISS Commanding Pages
- Attitude Timeline
- Ku-Band Antenna Masking Plan
- Flight Plan Notes
- Flight Plan Walkthrough

OVERVIEW TIMELINE

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STS-129/ULF3 Overview Timeline (11+1+2)

		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	317/0	1	2	3	4	5	6	7	8	9										
		MET													00/0	1	2	3	4	5	6	7	8	9	10	11	12										
FD 01	STS	11/12/09 Launch, GMTLO: 316/21:04:28													ASC	Post Insert	PTV 01 Setup	D/K	RMS C/O																		
	Orb Att														-ZLV -XVV																						
	WS/PDGF																																				
		^NC1 00/03:35																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	318/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	01/0	1	2	3	4	5	6	7	8	9	10	11											
FD 02	STS																																				
	Orb Att				-ZLV -XVV						Survey (Inertial)						-ZLV -XVV																				
	WS/PDGF																																				
		^NC2 00/16:12 ^Grapple ^NC3 01/03:21																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	319/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	02/0	1	2	3	4	5	6	7	8	9	10	11											
FD 03	STS																																				
	Orb Att				-ZLV -XVV			Dump			RNDZ						Bias -XLV -ZVV																				
	WS/PDGF																																				
		^Dump ^NH ^NC4 ^Ti ^Dock 1/21:30 ^N2 Transfer Init																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	320/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	03/0	1	2	3	4	5	6	7	8	9	10	11											
FD 04	STS																																				
	Orb Att				Campout EVA Prep			EVA 1 (SASA Transfer from PLB SWC - z1)			SSRMS Support			Post EVA																							
	WS/PDGF																																				
		^SSRMS N2 GRPL ^SSRMS RLS ELC1, MT XLT WS4																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	321/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	04/0	1	2	3	4	5	6	7	8	9	10	11											
FD 05	STS																																				
	Orb Att				DPC			DOUG			OBSS Unberth, H/O			Meal			EVA 2 Prep			OBSS H/O, Berth, ELC 2 Grapple			GRPL PDGF1			Campout											
	WS/PDGF																																				
		^N1 Port MID ^N1 Nadir MID ^Bias -XLV -ZVV																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	322/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	05/0	1	2	3	4	5	6	7	8	9	10	11											
FD 06	STS																																				
	Orb Att				Campout EVA Prep			EVA 2 (GATOR Inst, Relocate FPMU/VSSA to CP6)			Post EVA w/H2O, Metox																										
	WS/PDGF																																				
		^Install ELC2 to S3 Upr CAS ^GRPL PDGF1, RLS PDGF2																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	323/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	06/0	1	2	3	4	5	6	7	8	9	10	11											
FD 07	STS																																				
	Orb Att				DPC			Off Duty (4hrs)			Meal			EVA 3 Prep/Transfer			Transfer			EVA Proc Rvw			DPC			Campout											
	WS/PDGF																																				
		^Water Dump																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	324/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	07/0	1	2	3	4	5	6	7	8	9	10	11											
FD 08	STS																																				
	Orb Att				Campout EVA Prep			SSRMS Support			Meal			Transfer			Post EVA w/H2O, Metox																				
	WS/PDGF																																				
		^N1 Radial Cable ^Bias -XLV -ZVV																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	325/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	8/0	1	2	3	4	5	6	7	8	9	10	11											
FD 09	STS																																				
	Orb Att				DPC			Reboost			O2 Equip T/D			Xfr			Crew Conf & Photo			Meal			Off-Duty (2hrs)			Hatch Close			RNDZ Tools c/o								
	WS/PDGF																																				
		^BCM R&R ^BCM C/O																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	326/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	9/0	1	2	3	4	5	6	7	8	9	10	11											
FD 10	STS																																				
	Orb Att				Un-dock			Flyaround and Sep			Meal			OBSS			Late Inspection			OBSS																	
	WS/PDGF																																				
		^Undock 8/14:32 ^Water Dump																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	327/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	10/0	1	2	3	4	5	6	7	8	9	10	11											
FD 11	STS																																				
	Orb Att				SDBI 1900			FCS C/O & RCS Hot Fire			Pilot Ops			PAO Brief			Meal			Cabin Stow			RNDZ														
	WS/PDGF																																				
		^Water Dump																																			
		GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	328/0	1	2	3	4	5	6	7	8	9										
		MET	12	13	14	15	16	17	18	19	20	21	22	23	11/0	1	2	3	4	5	6	7	8	9	10	11											
FD 12	STS																																				
	Orb Att				IMU Align & Verif			Deorbit Prep			Entry																										
	WS/PDGF																																				
		^KSC Tigs: 10/18:24 ^KSC Landing: 10/19:27																																			

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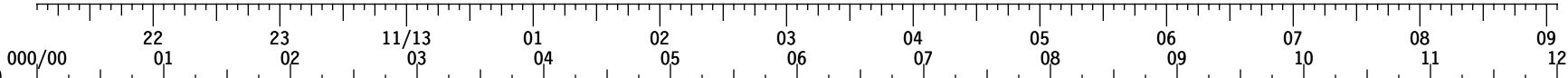
SUMMARY TIMELINE

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FD01

GMT 11/12/09 (316)

MET Day 000

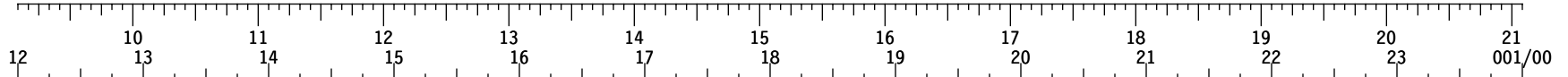


STS 129	LAUNCH	OMS 2	CDR HOBAUGH	POST INSERTION	LOA ADS AFT C/O ELEVON	NC1A OMS BURN	M-NZ NVLV	PI PRDU	PRE SLEEP	AP J@A/G	PRE SLEEP	WATCH	SLEEP	MNVR	
			PLT WILMORE	POST INSERTION	P/TV01 VIDEO SETUP	OMS BURN	B LE ELE * D	GR PR DB	DA TE SH E T	VE D IN DL K E O	UM B W E L L D/L	PRE SLEEP	WATCH	SLEEP	
			MS1 MELVIN	POST INSERTION	RMS* R M S * R P W R U P	PGSC SETUP (PART I)	RMS C/O	P M E D C K D C L K	ET P H O T O	PRE SLEEP	WATCH	SLEEP			
			MS2 BRESNIK	POST INSERTION	RMS* R M S * R P W R U P	OS CE A T I O N C U P	RMS C/O	P R E C R D L	PRE SLEEP	WATCH	SLEEP				
			MS3 FOREMAN	POST INSERTION	P/TV01 VIDEO SETUP	GIRA INSTALL	SEE SETUP	PRE SLEEP	WATCH	SLEEP					
			MS4 SATCHER	POST INSERTION	PGSC SETUP (PART I)	WLES ACT	TE P C O N	UN S T O W %	PRE SLEEP	WATCH	SLEEP				
DAY/NIGHT ORBIT															
TDRS WEZ															
ATTITUDE															
NOTES			<p>*ON-ORBIT INIT *ORIFICE @RECONFIG %SALIVA KIT</p>												

FD02

GMT 11/13/09 (317)

MET Day 000

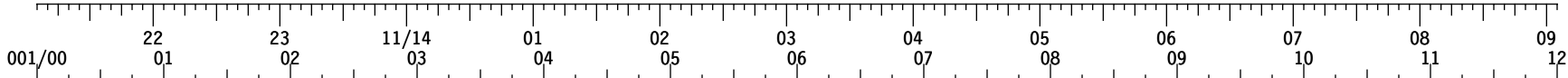


STS 129	CDR HOBAUGH		SLEEP		POST SLEEP		OMS BURN		POST SLEEP		STBD WING SURVEY		MEAL		H2O CWC S/U		FILTER CLEANING		COND CWC S/U			
	PLT WILMORE		SLEEP		POST SLEEP		OMS BURN		OBSS UNBERTH		STBD WING SURVEY		MEAL		NOSE CAP SURVEY		PORT WING SURVEY		OBSS BERTH			
	MS1 MELVIN		SLEEP		POST SLEEP				OBSS UNBERTH		STBD WING SURVEY		MEAL		NOSE CAP SURVEY		PORT WING SURVEY		OBSS BERTH			
	MS2 BRESNIK		SLEEP		POST SLEEP		MD I/N L I C A M		POST SLEEP		EMU C/O		MEAL		NOSE CAP SURVEY		PORT WING SURVEY		O2 INIT			
	MS3 FOREMAN		SLEEP		POST SLEEP				ERG SETUP		EMU C/O PREP		EMU C/O		MEAL		EMU PREP/ ISS XFER		EXERCISE		MDDK XFER PREP	
	MS4 SATCHER		SLEEP		POST SLEEP				ERG SETUP		EMU C/O PREP		EMU C/O		MEAL		EMU PREP/ ISS XFER		EXERCISE			
DAY/NIGHT ORBIT		9		10		11		12		13		14		15		16		17				
TDRS WEZ		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		
ATTITUDE		-ZLV -XVV		-ZLV -XVV		NC2		-ZLV -XVV		BIAS +YSI		BIAS +XSI		BIAS -YSI								
NOTES										*HTR RCNFG								#MANUAL				

FD02

GMT 11/13/09 (317)

MET Day 001

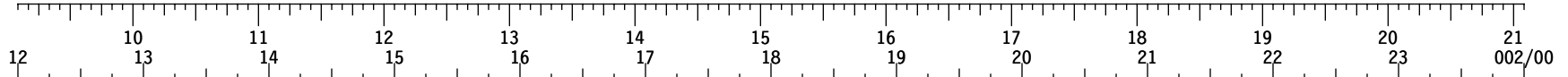


STS 129	CDR HOBAUGH		C/L CMR INSTL	EXERCISE	PRE SLEEP	NC3	RCS BURN	M - N Z V L R V M P M C N A / G	PRE SLEEP	SLEEP	
	PLT WILMORE	OBSRSTH	C/L CMR INSTL	FCMS OPS	EXERCISE	PRE SLEEP	RCS BURN		PRE SLEEP	SLEEP	
	MS1 MELVIN	OBSRSTH	REMLSC1 GRPL	ODS RING	RNDZ TOOLS C/O				PRE SLEEP	SLEEP	
	MS2 BRESNIK	REMLSC1 GRPL	OMS POD SRVY	ODS RING	RNDZ TOOLS C/O				PRE SLEEP	SLEEP	
	MS3 FOREMAN	MDDK XFER PREP		LDRI DOWNLINK					PRE SLEEP	SLEEP	
	MS4 SATCHER			NLP CELL ACT1	NLP VAC				PRE SLEEP	SLEEP	
DAY/NIGHT ORBIT		<p>Bar chart showing day/night cycles and orbit status from 17 to 25. Shaded bars indicate night periods, and solid bars indicate orbit status.</p>									
TDRS W E Z		<p>Bar chart showing TDRS (Tracking Data Relay Satellite) coverage for W, E, and Z links from 17 to 25.</p>									
ATTITUDE		<p>-ZLV -XVV NC3 -ZLV -XVV</p> <p>*OMS/RCS AC Motor Valve</p>									
NOTES											

FD03

GMT 11/14/09 (318)

MET Day 001

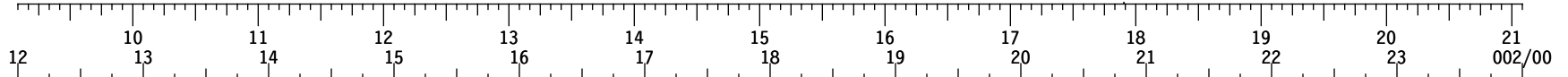


STS-129	CDR HOBAUGH	SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L	MNVRTA	HATCH OPEN	HELLO	SFTY BRIEF
	PLT WILMORE	SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L			HELLO	SFTY BRIEF
	MS1 MELVIN	SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L			HELLO	SFTY BRIEF
	MS2 BRESNIK	SLEEP	POST SLEEP	POST SLEEP	EXERCISE	ISS RNDZ OPS	APPROACH T/L		SFTY BRIEF
	MS3 FOREMAN	SLEEP	POST SLEEP	XFER UPDATE	EMU RMVL	EXERCISE	PTV02 S/U	P/TV02 DOCK	SFTY BRIEF
	MS4 SATCHER	SLEEP	POST SLEEP	EMU RMVL	EMU DRINK BAG FILL	EXERCISE		APPROACH T/L	SFTY BRIEF
DAY/NIGHT	[Day/Night Cycle Bar]								
ORBIT	[Orbit Cycle Bar]								
TDRS	[TDRS Cycle Bar]								
ORB ATT	[Orbit Att Cycle Bar]								
MT/SSRMS POS	[MT/SSRMS POS Cycle Bar]								
NOTES	<p style="text-align: center;">*DECNFG</p> <p style="text-align: right;">*DOCKING 1/21:30</p>								

FD03

GMT 11/14/09 (318)

MET Day 001



ISS	Activity	12	13	14	15	16	17	18	19	20	21	22	23	24			
ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	PREP WORK	DPC	ARED	CEVIS	MEAL	TIMER	TIMER	POST ARVL CNFG	HATCH LEAK CK ISS	ICOM	HATCH OPEN	HELLO	SFTY BRIEF	
	FE-1 SURAEV	SLEEP	POST SLEEP	PREP WORK	DPC	VELO	TVIS	TVIS HYG	MEAL	MRM2 XFER	DOCKING	CSOM	TELEX-15	HATCH OPEN	HELLO	SFTY BRIEF	
DN	FE-2 STOTT	SLEEP	POST SLEEP	PREP WORK	MTH NADPC	TVIS2	P/TV RPM VRFY S/U	ARED	MEAL	4 P ROOM TMS	RPM DDL	E-LK PREP	HATCH LEAK CK ISS	HATCH OPEN	HELLO	SFTY BRIEF	
ISS	FE-3 ROMANENKO	SLEEP	POST SLEEP	PREP WORK	DPC	TVIS	VELO	TVIS HYG	MEAL	MRM2 XFER	DOCKING*	RS OPS	HATCH OPEN	HELLO	SFTY BRIEF		
	FE-4 THIRSK	SLEEP	POST SLEEP	PREP WORK	DPC	DOCKING	TVIS2	CEVIS	MEAL	P/TV DOC	DOCKING	EVA CAMERA CNFG	HATCH OPEN	HELLO	SFTY BRIEF		
	FE-5 WILLIAMS	SLEEP	POST SLEEP	PREP WORK	DPC	CEVIS	P/TV RPM VRFY S/U	TVIS2	MEAL	8 P ROOM TMS	PCS	HATCH OPEN	HELLO	SFTY BRIEF			
DAY/NIGHT		14		15		16		1		2		3		4		5	
DAILY ORBIT		2961		2962		2963		2964		2965		2966		2967		2968	
ORBIT		2961		2962		2963		2964		2965		2966		2967		2968	
TDRS AVAIL		[Green]		[Green]		[Green]		[Green]		[Green]		[Green]		[Green]		[Green]	
NOTES		<p>*MSS-RWS CABLE-CNCT *INIT ©C&T-DK SM PA 3-CNFG</p> <p>♦EHS-GC/DMS-START</p> <p style="text-align: right;">*DOCKING 1/21:30</p>															

NO EXERCISE
[Until @ Hover Posn]

NO EXERCISE
[Both Arms Grappled]

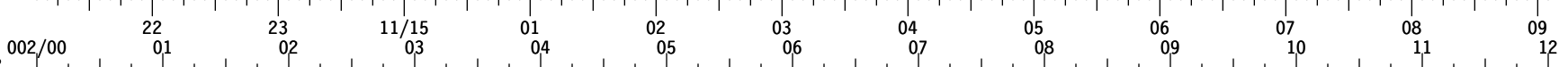
NO EXERCISE
[While at ELC1 Install Posn]

NO UNISOLATED EXERCISE
[MT Translate]

FD03

GMT 11/14/09 (318)

MET Day 002



STS - 129	CDR HOBAUGH	EMU XFER TO ISS	N2 XFER INIT	STS 02 P/B CONFIG	C I W N C I T # 1	EVA PROC REVIEW	PRE SLEEP	C W C T E R M	C W C X F E R	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP	
	M1 PLT WILMORE	P S T E V T O U P 5 P	SSRMS GRPL ELC1	SSRMS MNVR INSTL	ELC1 INSTALL	D A P U I D	EXERCISE	PRE SLEEP	SLEEP					
	R1 MS1 MELVIN	ELC1 UNBRTH	U N G R P L	S O D F X F E R	X F E R O P S	EVA PROC REVIEW	M D P R I S T E	X F E R	X F A G U R P	X B F R I E E F	PRE SLEEP	SLEEP		
	R2 MS2 BRESNIK	ELC1 UNBRTH	U N G R P L	T C O O N L F I G	EVA PROC REVIEW	PRE SLEEP	SLEEP							
	MS3 FOREMAN	TOOL CONFIG	E P R T E K	EVA PROC REVIEW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP						
	MS4 SATCHER	TOOL CONFIG	E P R T E K	EVA PROC REVIEW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP						
DAY/NIGHT ORBIT		33	34	35	36	37	38	39	40	41				
TDRS	W	[Timeline bars for W]												
	E	[Timeline bars for E]												
	Z	[Timeline bars for Z]												
ORB ATT	BIAS -XLV -ZVV													
MT/SSRMS POS	WS7/PDGF1													
MT/SSRMS POS	- MT XLATE TO WS4 -													
NOTES	*BRIEF													

NO EXERCISE
[Until @ Hover Posn]

NO EXERCISE
[Both Arms
Grappled]

NO EXERCISE
[While at ELC1
Install Posn]

NO UNISOLATED EXERCISE
[MT Translate]

FD03

GMT 11/14/09 (318)

MET Day 002

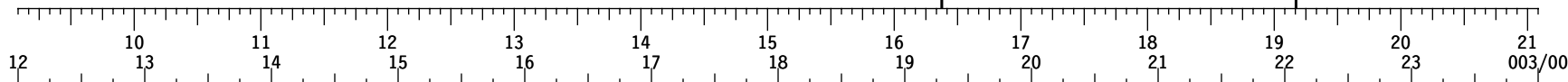
		002/00	22 01	23 02	11/15 03	01 04	02 05	03 06	04 07	05 08	06 09	07 10	08 11	09 12	
ISS	ISS CDR DE WINNE	SAFETY EMU XFER TO ISS		STS 02 P/B CONFIG	N2 XFER IT	EVA PROC REVIEW	PREP DPC WORK	PRE SLEEP			SLEEP				
	FE-1 SURAEV	TEXT-15 DAKON DL	TEXT OFF	MRM2 XFER		EVA PROC REVIEW	PREP DPC WORK	PRE SLEEP			SLEEP				
	FE-2 STOTT	RE INST STALL	REBA C/O	E-LK PREP	ELC1 INSTALL	PREP DPC WORK	PRE SLEEP	M A S K P B	PRE SLEEP	SLEEP					
ISS	FE-3 ROMANENKO	COX	MRM2 XFER		EVA PROC REVIEW	PREP DPC WORK	PRE SLEEP			SLEEP					
	FE-4 THIRSK	SAFETY RE INSTALL		EX DL	EVA PROC REVIEW	P W O R K P K	DPC	PRE SLEEP			SLEEP				
	M2 FE-5 WILLIAMS	SSRMS GRPL ELC1	SSRMS MNRV INSTL	EVA PROC REVIEW	PREP DPC WORK	PRE SLEEP			RE ACHT	SLEEP					
DAY/NIGHT		6		7		8		9		10		11		12	
DAILY ORBIT		2969		2970		2971		2972		2973		2974		2975	
ORBIT		2969		2970		2971		2972		2973		2974		2975	
TDRS AVAIL		[Green]		[Green]		[Green]		[Green]		[Green]		[Green]		[Green]	
NOTES		*BRIEF		*EHS-GC/DMS-STOP											

NO UNISOLATED EXERCISE
[During SASA Install]

FD04

GMT 11/15/09 (319)

MET Day 002



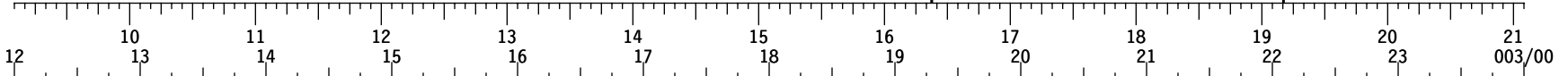
STS-129	CDR HOBAUGH	SLEEP	LOG	POST SLEEP	PMC A/G	POST SLEEP	IPNAHDI B	EXERCISE	PEV/TAS/UV07	CWICIT #2	P/TV07 EVA	CWCTERM	MEAL	P/TV07 EVA	CWICIT #3	P/TV07 EVA	CWCTERM	
	M2 PLT WILMORE	SLEEP		POST SLEEP	HYG BRK/HATCH CLS	CAMPOUT EVA PREP	EMURGE	EMU PREBREATHE	C LK DPRS	PIDPS	SSRMS SASA XFR/LEE							
	M1 MS1 MELVIN	SLEEP	LOG	POST SLEEP			MDCKICUC	XUFPDRA TE	XFER OPS	EXERCISE	SSRMS SASA XFR/LEE							
	IV MS2 BRESNIK	SLEEP	LOG	POST SLEEP				EXERCISE	IVA SUPPORT PREP	EVA IVA SUPPORT								
	EV1 MS3 FOREMAN	SLEEP	LOG	POST SLEEP	HYG BRK/PREBREATHE	CAMPOUT EVA PREP	EMURGE	EMU PREBREATHE	C LK DPRS	PIDPS	EVA 1 (6:30)			ESGRTU/SS/	SPARE SASA INSTL	ROUTE SGANT CABLE	NH3 BRKT INSTL	NFSIGHBI/EMLMDOD
	EV2 MS4 SATCHER	SLEEP	LOG	POST SLEEP	HYG BRK/PREBREATHE	CAMPOUT EVA PREP	EMURGE	EMU PREBREATHE	C LK DPRS	PIDPS	EVA 1 (6:30)			ESGRTU/SS/	SPARE SASA INSTL	POA LUBE	JEM RMS EE LUBE	
DAY/NIGHT ORBIT		41		42		43		44		45		46		47		48		
TDRS	WEZ	[Timeline bars for TDRS, WEZ, ORB ATT, MT/SSRMS POS]																
ORB ATT		BIAS -XLV -ZVV																
MT/SSRMS POS		WS4/PDGF1																
NOTES																		

NO UNISOLATED EXERCISE
[During SASA Install]

FD04

GMT 11/15/09 (319)

MET Day 002



ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	DPC	PREP WORK	TVIS2			ARED	JDE EEM AR CR MT S	MEAL	3DS-ISS CDR-PLC		JAR RMT S FIN H	JEM RMS EE MAN OP/CL	
	FE-1 SURAEV	SLEEP	POST SLEEP	DPC	PREP WORK	MRM2 DSMBLE	MRM2 XFER				MEAL	MRM2 ODF		TVIS	ARED	
DN	FE-2 STOTT	SLEEP	POST SLEEP	HYG BRK/HATCH CLS	CAMPOUT EVA PREP		EMURGE	EMU PREBREATHE	C_LK DPRS		ARED	MEAL	NOD1 PORT MID IMV		TVIS2	
ISS	FE-3 ROMANENKO	SLEEP	POST SLEEP	DPC	PREP WORK	MRM2 DSMBLE	MRM2 XFER				MEAL			TVIS		
	FE-4 THIRSK	SLEEP	POST SLEEP	TEST	DPC	PREP WORK	ARED	TVIS2	DCB APXC UNPK	3DS-FE4-PLC	MEAL	CSA-CP ACO	IMAK UNPACK	MRES DPLY KIT	CFW CLL 1	CWC I*
	FE-5 WILLIAMS	SLEEP	POST SLEEP	REACT	DPC	PREP WORK	CSI03 INSTL ACT	ARED	CERISE SAMPLE PREP	CERISE	MEAL	ARED STW	NOD1 PORT MID IMV		ARED DPLY	
DAY/NIGHT		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]
DAILY ORBIT		14	15	1	2	3	4	5	6	7						
ORBIT		2977	2978	2979	2980	2981	2982	2983	2984	7						
TDRS AVAIL		[Green/Orange bars]														

NOTES

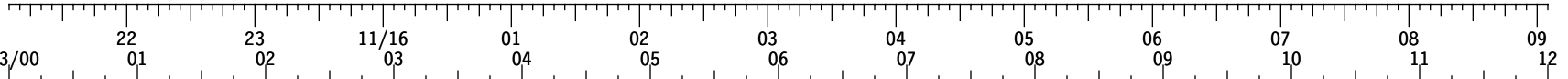
*FILL-PT2

FD04

GMT 11/15/09 (319)

003/00

MET Day 003

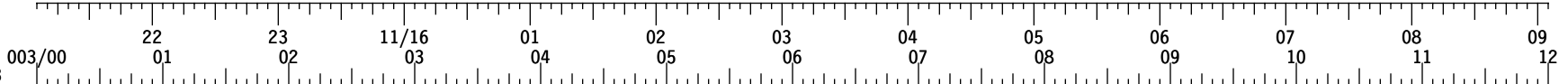


STS-129	CDR HOBAUGH	CWC XFER (2)	SSRMS N2 PDGF WLKOFF	COND CWC C/O	XFER OPS	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP												
	M2 PLT WILMORE	SSRMS SASA XFR/LEE		PCRRPKS	POST EVA W/H2O			PRE SLEEP	SLEEP												
	M1 MS1 MELVIN	SSRMS SASA XFR/LEE	SSRMS N2 PDGF WLKOFF	XFER OPS	NLP TRM 1	NLP CELL TERM	MDDKCK	XFAEGURP	XBREREF	PRE SLEEP	SLEEP										
	IV MS2 BRESNIK	EVA IVA SUPPORT		LIQH SWAP	PRE SLEEP		BSA INIT			PRE SLEEP	SLEEP										
	EV1 MS3 FOREMAN	NFS IGH BIE /MLMD O D	SO 1/4 CABLE	CLNUP & INGRS	PCRRPKS	POST EVA W/H2O		PSRL EEP	PCO SNTF EVA	PRE SLEEP	SLEEP										
	EV2 MS4 SATCHER	JEM RMS EE LUBE		CLNUP & INGRS	PCRRPKS	POST EVA W/H2O				PRE SLEEP	SLEEP										
DAY/NIGHT ORBIT		49		50		51		52		53		54		55		56					
TDRS W E Z		[Activity bars for TDRS W, E, Z]																			
ORB ATT		[Activity bars for ORB ATT]																			
MT/SSRMS POS		W/O TO N2		BIAS -XLV -ZVV																WS4/NODE2	
NOTES																					

FD04

GMT 11/15/09 (319)

MET Day 003



ISS	ISS CDR DE WINNE				PREP WORK	DPC	PRE SLEEP	SLEEP									
	FE-1 SURAEV	ARED	TVIS HYG	COX	PREP WORK	DPC	PRE SLEEP	SLEEP									
DN	FE-2 STOTT	TVIS2	PREP WORK	P C R P R S	POST EVA W/H2O		PRE SLEEP	SLEEP									
ISS	FE-3 ROMANENKO	TVIS	ARED	TVIS HYG	IMS	PW	DPC	PRE SLEEP	SLEEP								
	FE-4 THIRSK	C W I I *	CEVIS	G L D / L O V E	PREP WORK	DPC	PRE SLEEP	SLEEP									
	FE-5 WILLIAMS		TVIS2	E X D L	PREP WORK	DPC	PRE SLEEP	R E A C T	SLEEP								
DAY/NIGHT		7		8		9		10		11		12		13		14	
DAILY ORBIT		2985		2986		2987		2988		2989		2990		2991		2992	
TDRS AVAIL																	
NOTES		*FILL-PT2															

FD05

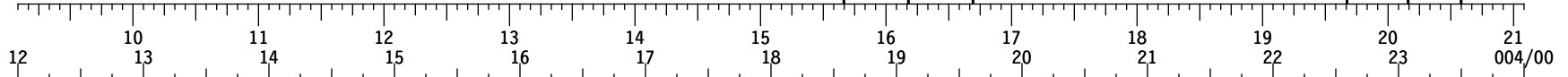
GMT 11/16/09 (320)

MET Day 003

NO EXERCISE
[Both Arms Grappled]

NO EXERCISE
[LCS IMAGING]

NO EXERCISE
[Both Arms Grappled]



STS-129	M2/R3 CDR HOBAUGH	SLEEP	POST SLEEP	PEAVOENT SPINAL	POST SLEEP	FI DOUG REVIEW	OBSS GRPL	OBSS MNVR H/O	OUNSGRPL	SMV SNR RMR SFI	FOCUSSED INSPECTION				OBSS PRE GRPL	GRPL	OBSS BERTH		
	R2 PLT WILMORE	SLEEP	POST SLEEP	PEAVOENT SPINAL	POST SLEEP	FI DOUG REVIEW	GRRA PPLE	MRL RLLS	CIN CIT #4	ROMBSS GRPL	CLEAR	CWC TERM	FOCUSSED INSPECTION				OBSS*	RUMN GRPL	EXERCISE
	R1 MS1 MELVIN	SLEEP	POST SLEEP	PEAVOENT SPINAL	POST SLEEP	FRID DOUG	GRRA PPLE	FC/LO ABSTER	ABRS XFER	ROMBSS GRPL	CLEAR	FOCUSSED INSPECTION				OBSS*	RUMN GRPL	SCPL ICNTAL	
	MS2 BRESNIK	SLEEP	POST SLEEP	PEAVOENT SPINAL	POST SLEEP	EXERCISE	BSA INIT	BSA INIT	EMU SWAP	BMI AEN TTS TOT /XL	MEAL	E_LK PREP	EVA TOOL CONFIG	CIN CIT #5	SCPL ICNTAL	XFER OPS	CWC TERM		
	MS3 FOREMAN	SLEEP	POST SLEEP	SPINAL	POST SLEEP	SHG TAHT NNT AD LNG	XFE DRA TE	SPINAL H/W SETUP	EMU SWAP	BMI AEN TTS TOT /XL	MEAL	E_LK PREP	EVA TOOL CONFIG	SCPL ICNTAL	SPINAL OPERATOR				
	M1 MS4 SATCHER	SLEEP	POST SLEEP	SPINAL	POST SLEEP	OBSS GRPL	OBSS MNVR H/O	OUNSGRPL	SMV SNR RMR SFI	MEAL	XFER OPS	EVA TOOL CONFIG	OBSS PRE GRPL	GRPL	OBSS BERTH				
DAY/NIGHT		ORBIT		57		58		59		60		61		62		63		64	
TDRS		WEZ		57		58		59		60		61		62		63		64	
ORB ATT		MT/SSRMS POS		BIAS -XLV -ZVV		WS4/NODE2		*RPRS INIT		*RPRS TERM		*MNVR-H/O							
NOTES																			

FD05

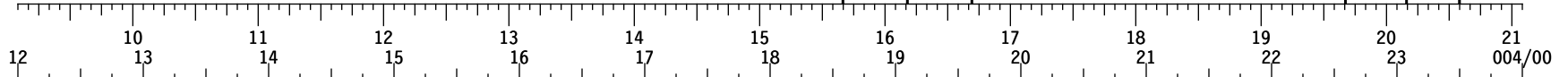
GMT 11/16/09 (320)

MET Day 003

NO EXERCISE
[Dual Arm Ops]

NO EXERCISE
[LCS IMAGING]

NO EXERCISE
[Dual Arm Ops]



ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	DPC PW	ARED			MEAL	ND1 PM CABLE	C/O	ND1 NM CABLE		
	FE-1 SURAEV	SLEEP	POST SLEEP	DPC PW	VELO	Φ-CB-MNT		MEAL	MO1	5P9 UY-3 YC17 SW/O	TVIS		
	DN FE-2 STOTT	SLEEP	POST SLEEP	DPC PW	TVIS2	ARED	ND1 PM IMV		MEAL	ND1 PM CABLE	SOP PIE R A A L T O R	ND1 NM CABLE	
ISS	FE-3 ROMANENKO	SLEEP	POST SLEEP	DPC PW	VELO	TVIS	TVIS HYG	MEAL	MO1	CB-C-MNT		C O K	
	FE-4 THIRSK	SLEEP	POST SLEEP	DPC PW	TVIS2	ABRS XFER		MEAL		D2XS CAMR	CF W I C L I 1	CF W I C L I 2	
	FE-5 WILLIAMS	SLEEP	POST SLEEP	DPC PW	CEVIS	ARED STW	ND1 PM IMV		MEAL	XFER OPS	CERISE INST&ACT	S P L I C T A L	TVIS2
DAY/NIGHT		■		■		■		■		■		■	
DAILY ORBIT		15	16	1	2	3	4	5	6				
ORBIT		2993	2994	2995	2996	2997	2998	2999	3000				
TDRS AVAIL		■											

*JPM-SHUTTER-CL

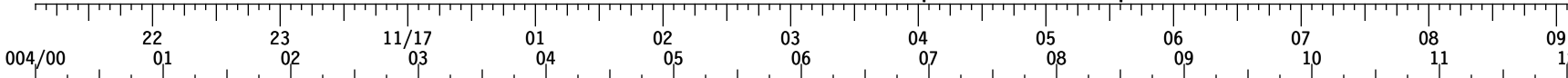
NOTES

NO UNISOLATED EXERCISE
[MT Translate]

FD05

GMT 11/16/09 (320)

MET Day 004



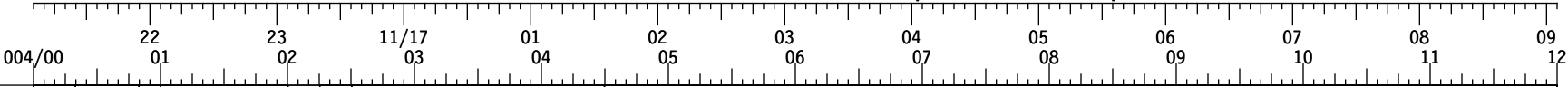
STS - 129	M2/R3 CDR HOBAUGH	OBSRTH	SSRMS GRPL PDGF1	REMLSC2 GRPL	SCPLICNTAL	PSLEEPE	PEAVOENT	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP				
	R2 PLT WILMORE	EXERCISE		EVA PROC REVIEW	SCPLICNTAL	PEAVOENT		PRE SLEEP			SLEEP				
	R1 MS1 MELVIN	MRL	SSRMS GRPL PDGF1	REMLSC2 GRPL	XTFAEGURP	PEAVOENT	XBFRIF	PRE SLEEP			SLEEP				
	MS2 BRESNIK	CWC XFER (2)		EVA PROC REVIEW		PRE SLEEP		MASK PB/TOOL CONFIG	PRE SLEEP		SLEEP				
	MS3 FOREMAN	EXERCISE		EVA PROC REVIEW		PRE SLEEP		MASK PB/TOOL CONFIG	PRE SLEEP		SLEEP				
	M1 MS4 SATCHER	OBSRTH	SCPLICNTAL	EVA PROC REVIEW	PSLEEPE	PEAVOENT		PRE SLEEP			SLEEP				
DAY/NIGHT		[Timeline with alternating black and white bars]													
ORBIT		[Timeline with alternating black and white bars]													
TDRS		[Timeline with alternating black and white bars]													
ORB ATT		[Timeline with alternating black and white bars]													
MT/SSRMS POS		WS4/NODE2				BIAS -XLV -ZVV				W/O TO PDGF1		XLATE AND W/O		WS2/PDGF2	
NOTES															

NO UNISOLATED EXERCISE
[MT Translate]

FD05

GMT 11/16/09 (320)

MET Day 004



ISS	ISS CDR DE WINNE	NC DA BL NE	C/O	ARE DD PY	TVIS2	DPC	PRE SLEEP	SLEEP											
	FE-1 SURAEV	TVIS	TVIS HYG	IMS	PREP WORK	DPC	PRE SLEEP	SLEEP											
	FE-2 STOTT	NC DA BL NE	SOP PIE NR AA LT OR	EVA PROC REVIEW	SOP PIE NR AA LT OR	SPINAL H/W STOW	PRE SLEEP	MA SK PB PRE SLEEP	SLEEP										
ISS	FE-3 ROMANENKO	COX	EDB	PREP WORK	DPC	PRE SLEEP	SLEEP												
	FE-4 THIRSK	PREP WORK	ARED	DPC	PRE SLEEP	SLEEP													
	FE-5 WILLIAMS	TVIS2	EVA PROC REVIEW	EX DL	DPC	PRE SLEEP	RE ACT	SLEEP											
DAY/NIGHT		7		8		9		10		11		12		13		14			
DAILY ORBIT		6		7		8		9		10		11		12		13		14	
ORBIT		3001		3002		3003		3004		3005		3006		3007		3008			
TDRS AVAIL		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]			
NOTES																			

NO EXERCISE
[Until @ Hover Posn]
NO EXERCISE
[Both Arms Grappled]

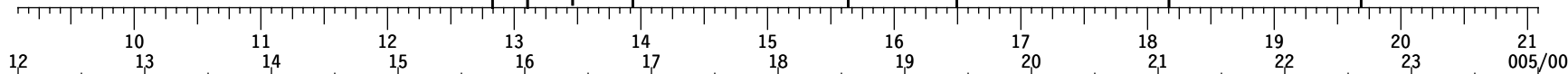
NO EXERCISE
[While at ELC2
Install Posn]

NO UNISOLATED EXERCISE
[During PAS Deploy]

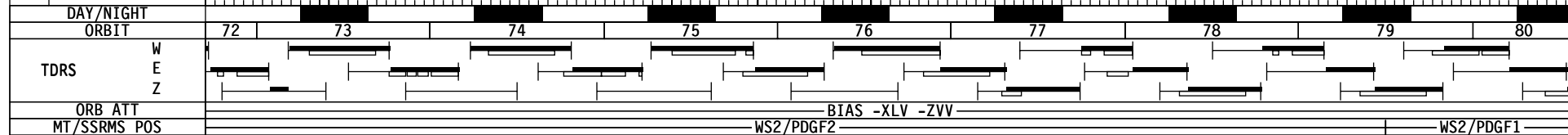
FD06

GMT 11/17/09 (321)

MET Day 004



STS-129	R2 CDR HOBAUGH	SLEEP	LOG	POST SLEEP	PMC A/G	POST SLEEP	IP MHD UIB	ELC2 UNBRTH	RMS RLS	RM NSVR*	PE VTS/U	CIN CIT #6	P/TV07 EVA	CW C T E R M	D A P U D	P/TV07 EVA	MEAL	FILTER INSPECT	CIN C I T #7	P/TV07 EVA	CW C T E R M	CWC XFER (2)	
	M2 PLT WILMORE	SLEEP	LOG	POST SLEEP		HYG BRK/ HATCH CLS	CAMPOUT EVA PREP	EP MURGE	EMU PREBREATHE	C_LK DPRS	P-D DPS		XFER OPS	SSRMS GRPL MBS1	EXERCISE	MEAL	XFER OPS					SSRMS RLS MBS2	
	R1/M1 MS1 MELVIN	SLEEP	LOG	POST SLEEP				MX DF DC KRAI TU CK	ELC2 UNBRTH	RMS RLS	SO CR AMS	RM NSVR*	SSRMS MNVR INSTL	ELC2 INSTALL	SSRMS GRPL MBS1	XFER OPS	MEAL	EXERCISE					SSRMS RLS MBS2
	EV3 MS2 BRESNIK	SLEEP	LOG	POST SLEEP		HYG BRK/ PREBREATHE	CAMPOUT EVA PREP	EP MURGE	EMU PREBREATHE	C_LK DPRS	P-D DPS	ES GE RT SU P /	GATOR INSTALL	FPMU RELOCATE	EVA 2 (6:30)			S3 NADIR PAS DEPLOY	CP1 WETA INSTL	GET AHEADS	*		
	EV1 MS3 FOREMAN	SLEEP	LOG	POST SLEEP		HYG BRK/ PREBREATHE	CAMPOUT EVA PREP	EP MURGE	EMU PREBREATHE	C_LK DPRS	P-D DPS	ES GE RT SU P /	GATOR INSTALL	FPMU RELOCATE	S3 NADIR PAS DEPLOY	CP1 WETA INSTL	GET AHEADS	⊕					
	IV MS4 SATCER	SLEEP	LOG	POST SLEEP														EVA IVA SUPPORT					



NOTES

*TO VIEWING POSITION

*CLNUP & I
⊕CLNUP & I

NO EXERCISE
[Until @ Hover Posn]

NO EXERCISE
[Both Arms Grappled]

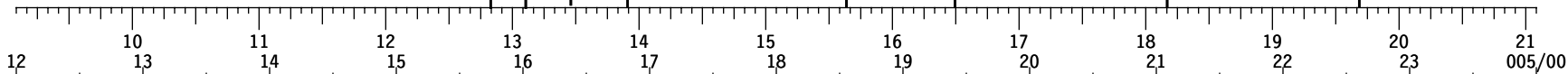
NO EXERCISE
[While at ELC2
Install Posn]

NO UNISOLATED EXERCISE
[During PAS Deploy]

FD06

GMT 11/17/09 (321)

MET Day 004



ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	PREP WORK	DPC	ARED STW	ND1 A IMV	GERLPC L2		ND1 A IMV	MEAL	ND1 A IMV	ARED DDPY	CEVIS	ARED			
	FE-1 SURAEV	SLEEP	POST SLEEP	PREP WORK	DPC		MRM2 TCS				MEAL			TVIS	VELO			
DN	FE-2 STOTT	SLEEP	POST SLEEP	HYG BRK/HATCH CLS		CAMPOUT EVA PREP	EMU PREBREATHE	C_LK DPRS	P-DPPS	ELC2 INSTALL	MEAL	MDS	MDS FEVS	PW	ARED			
	FE-3 ROMANENKO	SLEEP	POST SLEEP	PREP WORK	DPC		MRM2 TCS				MEAL		IMS	COX	VELO	TVIS		
ISS	FE-4 THIRSK	SLEEP	POST SLEEP	PREP WORK	DPC	WIDMVA S/US/U	PHOTO	TAGES HARVEST	CAMBIUM LOOP/PLANT	AWRBAEFTSEIRL	⊕	XFER OPS	MEAL	PDAISINHTW	DHOS-IPNASTS	XFER OPS	⬥	PREP WORK
	FE-5 WILLIAMS	SLEEP	POST SLEEP	PREP WORK	DPC	ND1 A IMV	GERLPC L2	SO SCRAMS		SSRMS MNVR INSTL	ND1 A IMV	MEAL	ND1 A IMV		PREP WORK	TVIS2		

DAY/NIGHT	[Day/Night Cycle]								
DAILY ORBIT	14	15	1	2	3	4	5	6	7
ORBIT	3008	3009	3010	3011	3012	3013	3014	3015	3016
TDRS AVAIL	[TDRS Availability Bar]								

NOTES

⊕EHS-GC/DMS-START

♣P33-MO-9-PREP-FE1

⬥EHS-GC/DMS-STOP

NO UNISOLATED EXERCISE

[MT Translate]

FD06

GMT 11/17/09 (321)

MET Day 005

005/00

22 01 23 02 11/18 03 01 04 02 05 03 06 04 07 05 08 06 09 07 10 08 11 09 12

STS - 129	<p>R2 CDR HOBAUGH</p>	<p>DUMP EQUIP GTHR</p>	<p>PRE SLEEP</p>	<p>ARED EXERCISE</p>	<p>PRE SLEEP</p>	<p>PMC OCA</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>	
	<p>M2 PLT WILMORE</p>	<p>SRL SLS MMS MBS SS2</p>	<p>POST EVA W/H20</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>	<p>ISS EXTERNAL SURVEYS</p>			
	<p>R1/M1 MS1 MELVIN</p>	<p>SRL SLS MMS MBS SS2</p>	<p>POST EVA W/H20</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>				
	<p>EV3 MS2 BRESNIK</p>	<p>CIL LNG URR PS &</p>	<p>POST EVA W/H20</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>				
	<p>EV1 MS3 FOREMAN</p>	<p>CIL LNG URR PS &</p>	<p>POST EVA W/H20</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>				
	<p>IV MS4 SATCER</p>	<p>ESV UAP IORT</p>	<p>EXERCISE</p>	<p>PRE SLEEP</p>	<p>BSA INIT</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>		
DAY/NIGHT									
ORBIT									
TDRS									
ORB ATT									
MT/SSRMS POS	<p>WS2/PDGF1 BIAS -XLV -ZVV XLATE WS3 WS3/PDGF1</p>								
NOTES									

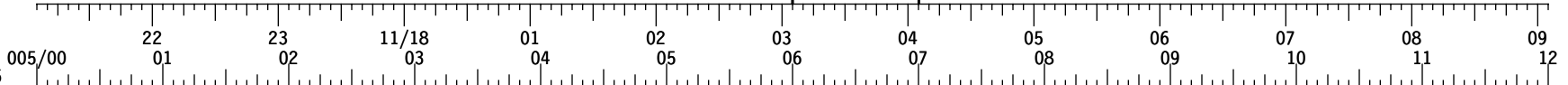
NO UNISOLATED EXERCISE

[MT Translate]

FD06

GMT 11/17/09 (321)

MET Day 005

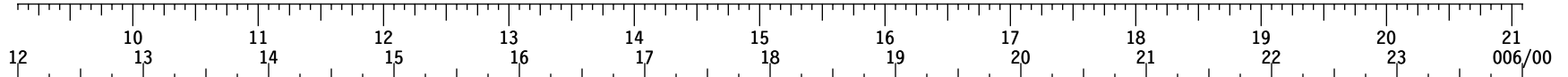


ISS	ISS CDR DE WINNE	ARED	PW	DPC	PRE SLEEP		SLEEP												
	FE-1 SURAEV	VELO	TVIS HYG	PREP WORK	DPC	PMC	PRE SLEEP		SLEEP										
DN	FE-2 STOTT	PCRP RTR PKS	POST EVA W/H2O		TVIS2		PRE SLEEP		SLEEP										
			ISS	FE-3 ROMANENKO	TVIS	TVIS HYG	PREP WORK	DPC	PS RLE EEP	PMC	PRE SLEEP		SLEEP						
ISS	FE-4 THIRSK	PREP WORK	D/L	TVIS2	DPC	ARED		PRE SLEEP		SLEEP									
	FE-5 WILLIAMS	TVIS2	CEVIS	EXDL	DPC	PRE SLEEP		REACT	SLEEP										
	DAY/NIGHT	7		8		9		10		11		12		13		14		15	
DAILY ORBIT	3016		3017		3018		3019		3020		3021		3022		3023		3024		
TDRS AVAIL	[Color-coded availability bars]																		
NOTES																			

FD07

GMT 11/18/09 (322)

MET Day 005

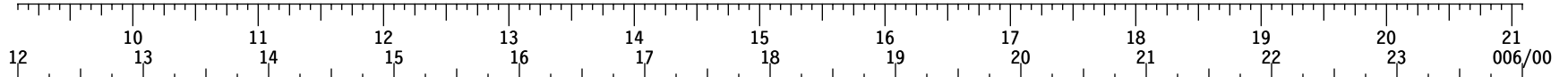


STS-129	CDR HOBAUGH	SLEEP	LOG	POST SLEEP	ILLI-OUCO	OFF DUTY	MEAL	H/O	M/NVMP	COND-I	COND-2*	PAVENT	COND-T	PWR DUMP	MNVRT EA	COND-2*	DAPP/D	H/O	OLMM	
	PLT WILMORE	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	MEAL	CINWCT #8	CWCTERM	CINWCT #9	PAVENT	XFER OPS	CWCTERM	CWC XFER (2)	COND CWC/O	PAVENT	PROCRVW		
	MS1 MELVIN	SLEEP	LOG	POST SLEEP	GLWRCINR	OFF DUTY	PFC OCA	OFF DUTY	MEAL	XUFEDRAT	XFER OPS	PAVENT	EXERCISE	CINWCTERM	XFER OPS	PAVENT	PROCRVW			
	MS2 BRESNIK	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	EXERCISE	MEAL	E_LK PREP	EVA TOOL CONFIG	PROCRVW								
	MS3 FOREMAN	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	EMU SWAP	MEAL	BATT/METOX INSTL	E_LK PREP	EXERCISE	EVA TOOL CONFIG	PROCRVW						
	MS4 SATCHER	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	EMU SWAP	EXERCISE	MEAL	EVA TOOL CONFIG	PAVENT	PROCRVW							
DAY/NIGHT ORBIT		88	89	90	91	92	93	94	95	96										
TDRS W E Z		[Timeline bars for TDRS W E Z]																		
ORB ATT MT/SSRMS POS		BIAS -XLV -ZVV WS3/PDGF1 DUMP																		
NOTES		*RPRS INIT *RPRS TERM																		

FD07

GMT 11/18/09 (322)

MET Day 005



ISS	Activity	12	13	14	15	16	17	18	19	20	21	22	23	24									
ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP		PREP WORK	DPC	ARED		TVIS2	PREP	MEAL	OBT MRM2	PAO	CFWICL1	CFWICL2	PMC	XFER OPS						
	FE-1 SURAEV	SLEEP	PSM09	POST SLEEP		PREP WORK	DPC	MO9	TVIS	CB-B3-MNT		MEAL	OBT MRM2	COFC ANLZ	VELO		IMS	COX					
DN	FE-2 STOTT	SLEEP	SALHVA	POST SLEEP		PREP WORK	DPC	PLCK	ARED		PREP	MEAL	OBT MRM2	PAO	PMC	TVIS2		PAO					
	FE-3 ROMANENKO	SLEEP	POST SLEEP		PREP WORK	DPC	TVIS		MEAL	OBT MRM2	VELO												
ISS	FE-4 THIRSK	SLEEP	POST SLEEP		PREP WORK	DPC	DZXS	TVIS2	TOCA ANLYZ	MELFI^	ARED		DZXS	PREP	MEAL	OBT MRM2	PAO	TOCARCD	PMC	DZXS CAMR	CINCSUTALL	XFER OPS	
	FE-5 WILLIAMS	SLEEP	REACT	MO9	POST SLEEP		DPC	ARED		TVIS2	MEAL		OBT MRM2	ARYELNDR		CINSDPCT	PMC						
DAY/NIGHT		■		■		■		■		■		■		■		■		■		■		■	
DAILY ORBIT		15		16		1		2		3		4		5		6		7					
ORBIT		3024		3025		3026		3027		3028		3029		3030		3031		3032					
TDRS AVAIL		■		■		■		■		■		■		■		■		■		■		■	

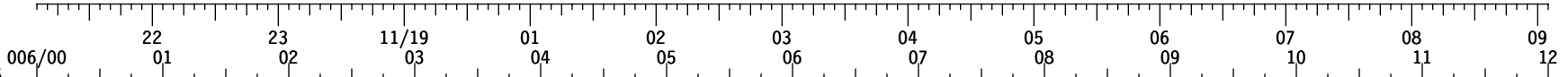
NOTES

*CMS-T2-CLEANING
^APXC INS

FD07

GMT 11/18/09 (322)

MET Day 006

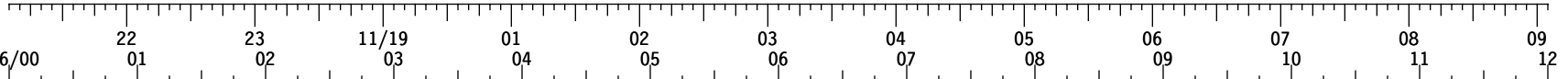


STS - 129	CDR HOBAUGH	PROC RVW	PRE SLEEP	ARED EXERCISE	PS RL EE EP	PMC A/G	PRE SLEEP	SLEEP							
									ISS EXTERNAL SURVEYS						
	PLT WILMORE	PROC RVW	ARED EXERCISE		ILLI - ON	PRE SLEEP		SLEEP							
	MS1 MELVIN	PROC RVW	M D D K K K	PS RL EE EP	XT FA ER UP	XB FR E IF	PRE SLEEP		SLEEP						
	MS2 BRESNIK	PROC RVW	PRE SLEEP		MASK PB/TOOL CONFIG		PRE SLEEP	SLEEP							
									10.2 DPRS						
MS3 FOREMAN	PROC RVW	POST EVA CONF	PRE SLEEP				SLEEP								
MS4 SATCHER	PROC RVW	PRE SLEEP		MASK PB/TOOL CONFIG		PRE SLEEP	SLEEP								
								10.2 DPRS							
DAY/NIGHT															
ORBIT															
TDRS W E Z															
ORB ATT															
MT/SSRMS POS															
BIAS -XLV -ZVV WS3/PDGF1															
NOTES															

FD07

GMT 11/18/09 (322)

MET Day 006



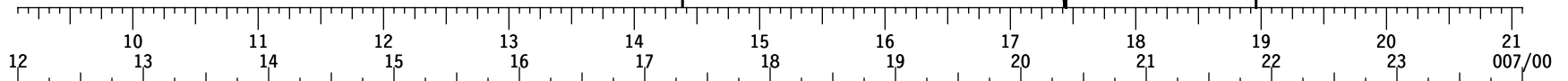
ISS	ISS CDR DE WINNE	PROC RVW	PW	DPC	PRE SLEEP	SLEEP													
	FE-1 SURAEV	PROC RVW	PW	DPC	PRE SLEEP	SLEEP													
DN	FE-2 STOTT	PROC RVW	PW	DPC	PRE SLEEP	M A S K P B	PRE SLEEP	SLEEP											
					PRE SLEEP	SLEEP													
ISS	FE-3 ROMANENKO	PROC RVW	PW	DPC	PRE SLEEP	SLEEP													
	FE-4 THIRSK	PROC RVW	PW	DPC	PRE SLEEP	SLEEP													
	FE-5 WILLIAMS	PROC RVW	PW	DPC	PRE SLEEP	R E E P H C H	SLEEP												
DAY/NIGHT		7		8		9		10		11		12		13		14		15	
DAILY ORBIT		3032		3033		3034		3035		3036		3037		3038		3039		3040	
TDRS AVAIL		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]	
NOTES																			

NO UNISOLATED EXERCISE [During HPGT Install] NO UNISOLATED EXERCISE [During PAS Deploy]

FD08

GMT 11/19/09 (323)

MET Day 006



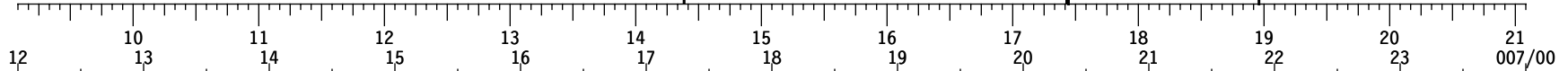
S T S - 1 2 9	CDR HOBAUGH	LOG POST SLEEP	PMC A/G	POST SLEEP	ILLI CLIO UFF	INH IB	PAD S*	CIN WCS #10	XFER OPS	N2 #7	PE V/T V07 /U	CW CTER M	P/T V07 EVA	N2 #1	PWR FILL #1	PWR FILL #2	PWR FILL #3	CIN WCS #11	MEAL	CW CTER M	CWC XFER (2)	PE S/ X/ T/ V08 /U S R V	P/T V08 EXT SRVY	N2 EQUIP T/D	ILLI TON	PRE SLEEP	
	M2 PLT WILMORE	LOG POST SLEEP		HYG BRK/ HATCH CLS				EP MUR GE	EMU PREBREATHE		C_LK DPRS	P DPS		SSRMS EVA 3 SPT					MEAL		XFER OPS		EXERCISE	P RPS	CR P TR KS	POST EVA W/H2O	
	M1 MS1 MELVIN	LOG POST SLEEP						EP MUR GE	EMU PREBREATHE		C_LK DPRS	P DPS		SSRMS EVA 3 SPT					MEAL					EXERCISE			
	EV3 MS2 BRESNIK	LOG POST SLEEP	14.7 RPRS	10.2 DPRS	HYG BRK/ PREBREATHE			EP MUR GE	EMU PREBREATHE		C_LK DPRS	P DPS	ES GRT EUS S/ /	EVA 3 (6:30)	HPGT XFR & MISSE 7				S3 ZENITH PAS DPLY			AS /H LIE L M D S	GET AHEADS	CLNUP & INGRS	P RPS	CR P TR KS	POST EVA W/H2O
	IV MS3 FOREMAN				POST SLEEP				EXERCISE		I VA SUPPORT PREP			EVA IVA SUPPORT													XFER OPS
	EV2 MS4 SATCHER	LOG POST SLEEP	14.7 RPRS	10.2 DPRS	HYG BRK/ PREBREATHE			EP MUR GE	EMU PREBREATHE		C_LK DPRS	P DPS	ES GRT EUS S/ /	HPGT XFR & MISSE 7					S3 ZENITH PAS DPLY			GET AHEADS		CLNUP & INGRS	P RPS	CR P TR KS	POST EVA W/H2O
DAY/NIGHT																											
ORBIT		104		105		106		107		108		109		110		111											
TDRS		W		E		Z																					
ORB ATT																											
MT/SSRMS POS																											
NOTES																											

*COMPACT *RPRS INIT *RPRS TERM

BIAS -XLV -ZVV
WS3/PDGF1

NO UNISOLATED EXERCISE [During HPGT Install] NO UNISOLATED EXERCISE [During PAS Deploy]

GMT 11/19/09 (323)
MET Day 006



ISS	ISS CDR DE WINNE	POST SLEEP	DPC	PREP WORK	RSILK RSILK	RSSILK INSUBATE GLACIER	RSILK M2	RSILK M2	⊕	ARED	ARED STW	NOD1 RAD CABLE	MEAL	NOD1 RAD CABLE	XFER OPS	N2 EQUIP T/D	TVIS2			
ISS	FE-1 SURAEV	POST SLEEP	DPC	PREP WORK	VELO	МБИ-20 FE1 EXE				M2-CTC CY-95 OUTFIT			MEAL	COX	♦	IMS	TVIS	TVIS HYG	PW ROR EPK	
DN	FE-2 STOTT	POST SLEEP	HYG BRK/ HATCH CLS	CAMPOUT EVA PREP			EMU MURGE	EMU PREBREATHE	C_LK DPRS	P DPS	⊗	MDS WATER RFILL	MEAL	♥	ARED			P R P K	CR PKS	POST EVA W/H2O
ISS	FE-3 ROMANENKO	POST SLEEP	DPC	PREP WORK	TVIS	TVIS HYG	Δ				MEAL	VELO								
ISS	FE-4 HIRSK	POST SLEEP	T E S T	P S O L E T E P	DPC	PREP WORK	M H A D M	ARED			CF W C L I 1	CF W C L I 2	GL O V E	MEAL	XFER OPS		TVIS2	PREP WORK		
ISS	FE-5 WILLIAMS	POST SLEEP	DPC	PREP WORK	TVIS2	M S C O P E	D E T A C H	CERISE CLCT1	A L T A G E R	CERISE CB OBS1	M E L F I	NOD1 RAD CABLE		MEAL	NOD1 RAD CABLE		N1 RAD ALCV CLSOUT	A R E D D P Y	POST EVA RCNFG XFR	ARED
DAY/NIGHT	[Bar chart showing day and night cycles]																			
DAILY ORBIT	15	1	2	3	4	5	6	7	8											
ORBIT	3040	3041	3042	3043	3044	3045	3046	3047												
TDRS	[Bar chart showing TDRS availability]																			
AVAIL	[Bar chart showing availability]																			

NOTES

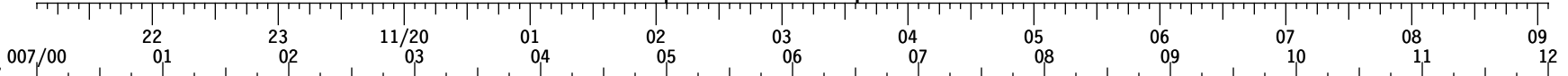
- *RSILK-ULF3-MELF INS ⊕IV-HPGT-CONFIG PT1 ♦МБИ-12-EXP-INIT
- ▲EHS-GC/DMS-START ⊗RSILK-ULF3-MELF RLCT ⚡EHS-GC/DMS-STOP ♥IV-HPGT-CONFIG PT2
- CERISE DET1 ΔМБИ-20-FE3-HELP

NO UNISOLATED EXERCISE
[MT Translate]

FD08

GMT 11/19/09 (323)

MET Day 007



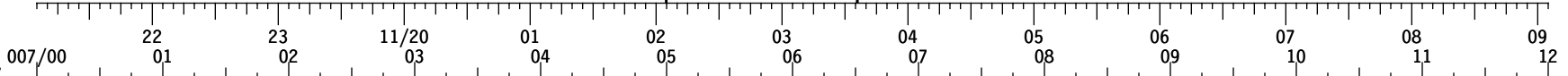
STS - 129	CDR HOBAUGH	PRE SLEEP	ARED EXERCISE	PMC A/G	PRE SLEEP	ISS EXTERNAL SURVEYS				SLEEP	FD09	LOG	POST SLEEP						
	PLT WILMORE	POST EVA W/H2O	PRE SLEEP			SLEEP				POST SLEEP									
	MS1 MELVIN	XFER OPS	MDD KCK XT FA EG RUP	XB FR EI RF	PRE SLEEP			SLEEP		LOG	POST SLEEP								
	MS2 BRESNIK	POST EVA W/H2O	PRE SLEEP			SLEEP				AS S R N	POST SLEEP								
	MS3 FOREMAN		PRE SLEEP			SLEEP				POST SLEEP									
	MS4 SATCHER	POST EVA W/H2O	PRE SLEEP			SLEEP				L O S P S L P S E G L R T E P A	POST SLEEP								
DAY/NIGHT ORBIT		112		113		114		115		116		117		118		119			
TDRS W E Z		[TDRS activity bars]																	
ORB ATT		[ORB ATT activity bars]																	
MT/SSRMS POS		WS3/PDGF1						BIAS -XLV -ZVV XLATE WS4						WS4/PDGF1					
NOTES																			

NO UNISOLATED EXERCISE
[MT Translate]

FD08

GMT 11/19/09 (323)

MET Day 007



ISS	ISS CDR DE WINNE	TVIS2	PW	DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-1 SURAEV	PREP WORK		DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-2 STOTT	POST EVA W/H2O	TVIS2		PRE SLEEP	SLEEP	POST SLEEP										
ISS	FE-3 ROMANENKO	EXDL	PW	DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-4 THIRSK	PREP WORK	EVA*	DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-5 WILLIAMS	ARED		DPC	PRE SLEEP	SLEEP	POST SLEEP										
DAY/NIGHT		8		9		10		11		12		13		14		15	
DAILY ORBIT		3048		3049		3050		3051		3052		3053		3054		3055	
TDRS AVAIL																	
NOTES		*D/L															

FD09

POST SLEEP

POST SLEEP

POST SLEEP

POST SLEEP

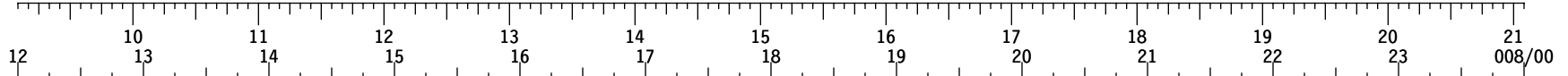
POST SLEEP

POST SLEEP

FD09

GMT 11/20/09 (324)

MET Day 007



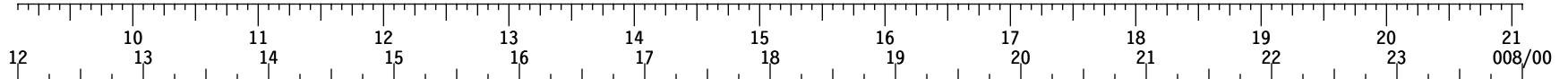
STS-129	CDR HOBAUGH	POST SLEEP	REBOOST EXERCISE	02 P/B TEARDOWN	MEAL	OFF DUTY														
	PLT WILMORE	POST SLEEP	POST SLEEP	XFER OPS		MEAL	OFF DUTY													
	MS1 MELVIN	POST SLEEP	XFER OPS	MDS XFER		MEAL	OFF DUTY													
	MS2 BRESNIK	POST SLEEP	POST EVA RCNFIG/XFR	XFER OPS	EXERCISE		MEAL	OFF DUTY												
	MS3 FOREMAN	POST SLEEP	POST EVA RCNFIG/XFR	XFER OPS	EXERCISE		MEAL	OFF DUTY												
	MS4 SATCHER	POST SLEEP	POST EVA RCNFIG/XFR	EXERCISE			MEAL	OFF DUTY												

DAY/NIGHT	Night		Day		Night		Day		Night		Day		Night		Day		Night		Day	
ORBIT	120		121		122		123		124		125		126		127					
TDRS	W		E		Z		W		E		Z		W		E		Z		W	
ORB ATT	BIAS -XLV -ZVV		REBOOST						BIAS -XLV -ZVV											
MT/SSRMS POS			*REBOOST		*TERM		*RESET		WS4/PDGF1											
NOTES																				

FD09

GMT 11/20/09 (324)

MET Day 007



ISS	ISS CDR DE WINNE	POST SLEEP	DPC	PREP WORK	ARED	PCS DEACT & XFR	02 P/B TEARDOWN	CREW CONF	CPHREO W T O	MEAL	TVIS2	FWAREL E L	HATCH CLOSE		
	FE-1 SURAEV	POST SLEEP	DPC	PREP WORK	* TVIS	ARED	CREW CONF	CPHREO W T O	MEAL	COX	Φ CB BT7 MNT	FWAREL E L	M5I 12 IMS CB Φ MNT		
DN	FE-2 STOTT	POST SLEEP	DPC	M V D I S D S / H S / U I S U D	MDS-FAC-DECONFIGURE	MDS XFER	S L V S T O W	CREW CONF	CPHREO W T O	MEAL	DCB RVW	DCB PACK	ARED	FWAREL E L	
	FE-3 ROMANENKO	POST SLEEP	DPC	PREP WORK	* ARED	19S PACK STW	CREW CONF	CPHREO W T O	MEAL	19S PACK STW	TVIS	FWAREL E L	⊕		
ISS	FE-4 THIRSK	POST SLEEP	DPC	ARED	WRS-RFTA-R&R	BCM-R&R	BCM-BATT-C/O	CREW CONF	CPHREO W T O	MEAL	DCB RVW	DCB PACK	DCB XFR	FWAREL E L	TVIS2
	FE-5 WILLIAMS	POST SLEEP	DPC	PREP WORK	TVIS2	M S L M F P / X G F L R C	CSA CP Z CAL	BCM-R&R	BCM-BATT-C/O	CREW CONF	CPHREO W T O	MEAL	CEVIS	FWAREL E L	ARED

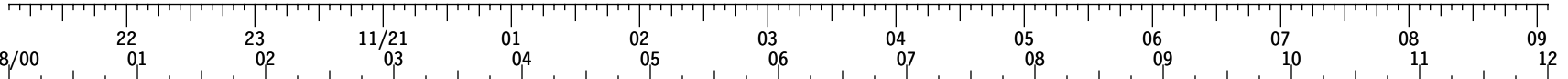
DAY/NIGHT	[Shaded bars indicating day/night cycle]															
DAILY ORBIT	[Shaded bars indicating orbit cycle]															
ORBIT	16	1	2	3	4	5	6	7	3056	3057	3058	3059	3060	3061	3062	3063
TDRS AVAIL	[Green and yellow bars indicating TDRS availability]															

NOTES *CTC-M5C-M2-TST ©C3M-M0-21M-PREP

FD09

GMT 11/20/09 (324)

MET Day 008 008/00

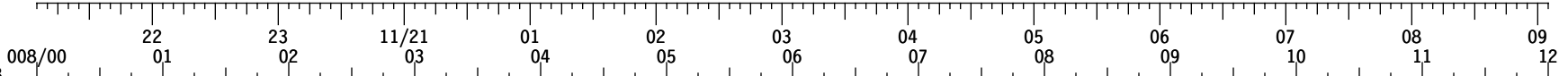


STS-129	CDR HOBAUGH	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP	FD10	POST SLEEP
	PLT WILMORE	EXER CISE		PRE SLEEP	SLEEP		POST SLEEP
	MS1 MELVIN	EXER CISE		PRE SLEEP	SLEEP		POST SLEEP
	MS2 BRESNIK			PRE SLEEP	SLEEP		POST SLEEP
	MS3 FOREMAN			PRE SLEEP	SLEEP		POST SLEEP
	MS4 SATCHER			PRE SLEEP	SLEEP		POST SLEEP
	MS5 STOTT			PRE SLEEP	SLEEP		POST SLEEP
DAY/NIGHT							
ORBIT							
TDRS							
ATTITUDE	BIAS -XLV -ZVV						
NOTES							

FD10

GMT 11/20/09 (324)

MET Day 008

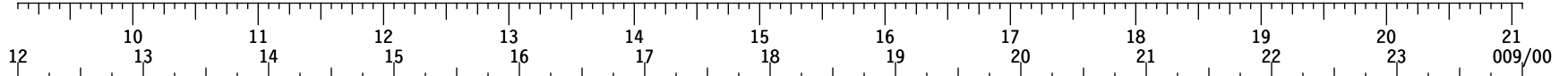


ISS	ISS CDR DE WINNE		PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-1 SURAEV		PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-3 ROMANENKO	EXDL	PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-4 THIRSK	TVIS2	PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-5 WILLIAMS	AREDD	PREP WORK	DPC	PRE SLEEP	SLEEP						
DAY/NIGHT												
DAILY ORBIT		7	8	9	10	11	12	13	14	15		
ORBIT			3064	3065	3066	3067	3068	3069	3070	3071		
NOTES												

FD10

GMT 11/21/09 (325)

MET Day 008

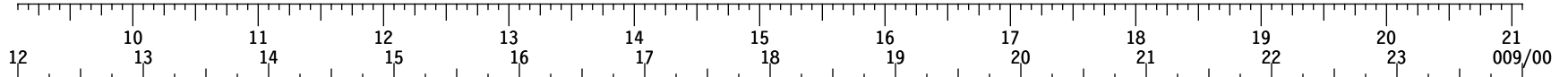


STS - 129	CDR HOBAUGH	POST SLEEP	GP RWH PR/UP	MNVR UNDOCK	UNDOCK	OPS	FLYAROUND	SEP	MEAL	WT AER MUD	CT O/ND	MS NT VBD	EXERCISE	MN NO VSE	MP NO VRT	M- N Z LV	PS RL EEP	
	PLT WILMORE	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL				OBSS UNBERTH	STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY	OBSS BERTH	
	MS1 MELVIN	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL				OBSS UNBERTH	STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY	OBSS BERTH	
	MS2 BRESNIK	POST SLEEP	GP RWH PR/UP	POST SLEEP	UNDOCK	OPS	FLYAROUND	SEP	MEAL				STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY	EXERCISE		
	MS3 FOREMAN	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL				EVA UNPACK & STOW	PST ISS EVA ENT PREP		EXERCISE		
	MS4 SATCHER	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL				EVA UNPACK & STOW	PST ISS EVA ENT PREP		EXERCISE	LDR1 DNLK	
	MS5 STOTT	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL					EXERCISE			MDS CK	
DAY/NIGHT		[Timeline bar with day/night indicators]																
ORBIT		[Timeline bar with orbit parameters]																
TDRS		[Timeline bar with TDRS events]																
ATTITUDE		[Timeline bar with attitude parameters]																
NOTES		*UNDOCK 08/14:32 #DEACT																

FD10

GMT 11/21/09 (325)

MET Day 008

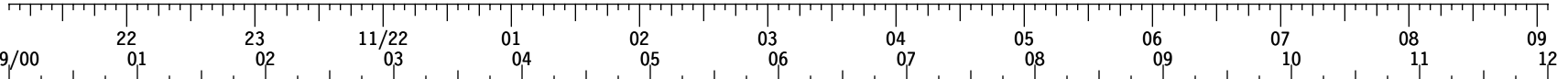


ISS	ISS CDR DE WINNE	POST SLEEP	PMA2 DPRS S/U	PREP WORK	DPC	PMA2 PT1	AUDIO	PMA2 PT2	TVIS2	PMA2 PT3	MEAL	BST SOWU	ARED	♣					
	FE-1 SURAEV	POST SLEEP		PREP WORK	DPC			TVIS	VELO	TVIS HYG	MEAL			IMS					
	FE-3 ROMANENKO	POST SLEEP		PREP WORK	DPC		FLYAROUND				MEAL		VELO	TVIS	TVIS HYG				
	FE-4 THIRSK	POST SLEEP	⊕	PREP WORK	PDC MEOPN 2AFRTG*		FLYAROUND	SODF DPLY			ARED	MEAL	♦	⊗	CWC	TVIS2	♥	EXDL	
	FE-5 WILLIAMS	POST SLEEP		PREP WORK	DPC		UVNDDKEO		UVNDDKEO		TVIS2	MEAL	WRS-RFTA-R&R		ARED				
DAY/NIGHT		15		1		2		3		4		5		6		7		8	
DAILY ORBIT		3072		3073		3074		3075		3076		3077		3078		3079			
ORBIT		⊕JPM-SHUTTER-CL										♦MDS-HISD VID-S/U		⊗MDS-PGB-DISASSEM/VID		♣PBA-RELOCATE		♥P/TV-EVA CAMR-RCNFG	
NOTES		*UNDOCK 08/14:32																	

FD10

GMT 11/21/09 (325)

MET Day 009

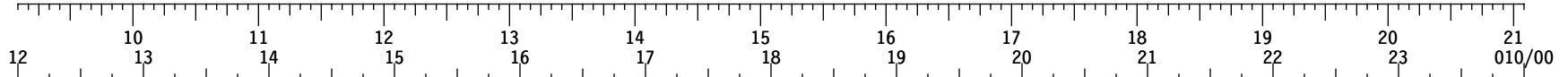


STS-129	CDR HOBAUGH	PRE SLEEP	PMC A/G	PRE SLEEP						SLEEP	FD11	POST SLEEP
	PLT WILMORE	* R P M W S R D N		PRE SLEEP						SLEEP		POST SLEEP
	MS1 MELVIN	⊕ R P M W S R D N		PRE SLEEP						SLEEP		POST SLEEP
	MS2 BRESNIK	♦		PRE SLEEP						SLEEP	DL SS LL VV AA	POST SLEEP
	MS3 FOREMAN			PRE SLEEP						SLEEP		POST SLEEP
	MS4 SATCHER	PRE SLEEP	PCG	PRE SLEEP						SLEEP	DL SS LL VV AA	POST SLEEP
	MS5 STOTT			PRE SLEEP						SLEEP	DL SS LL VV AA	POST SLEEP
DAY/NIGHT		[Bar chart showing day/night cycle]										
ORBIT		143	144	145	146	147	148	149	150	151		
TDRS		[Bar chart showing TDRS activity]										
ATTITUDE		-ZLV -XVV										
NOTES		*OBSS BERTH ⊕OBSS BERTH ♦EXERCISE *RATE RCNFG										

FD11

GMT 11/22/09 (326)

MET Day 009



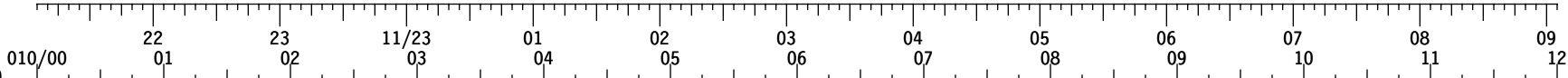
STS 129	CDR HOBAUGH	POST SLEEP	EXERCISE	FCS C/O	RFI SRE HOT	PILOT OPS	D/O BRIEF	PEAVO ENT	MEAL	MSI NIMRO	SIMO INIT	CABIN STOW	SIMO TERM	COND-I	CABIN STOW	COND-T	MZLV	CABIN STOW	MEALS
	PLT WILMORE	POST SLEEP	WASH HUB	FILTER CLEANING	FCS C/O	RFI SRE HOT	PILOT OPS	D/O BRIEF	PEAVO ENT	MEAL	EVS NTD TREP	CABIN STOW	EXERCISE	CABIN STOW					
	MS1 MELVIN	POST SLEEP	BSLE OUP	BLOOD COLL OPR	STOW	FCS C/O	RFI SRE HOT	PILOT OPS	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW	L-1 COMM CHK	EXERCISE	L-1 COMM CHK	CABIN STOW			
	MS2 BRESNIK	POST SLEEP	BCS LOU L	PS OLB	FCS C/O P/TV	CABIN STOW	COMM 2	CABIN STOW	DES SLV IA	D/O BRIEF	PEAVO ENT	MEAL	EXERCISE	CABIN STOW	DES SLV IA	CABIN STOW			
	MS3 FOREMAN	POST SLEEP	KSXDD	SD SE VACT	EXERCISE	CABIN STOW	PAO S/U	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW			ERG STOW	RCMBNT SEAT S/U	LAUNCH ENTRY SUIT CK			
	MS4 SATCHER	POST SLEEP	BCS LOU L	POST SLEEP	CABIN STOW	WASH	CABIN STOW	DES SLV IA	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW	DES SLV IA	CABIN STOW	EXERCISE	NLP TRM	NTPRM 2	CABIN STOW	WDL EACT
	MS5 STOTT	POST SLEEP	BCS LOU L	POST SLEEP	CABIN STOW	EXERCISE	DES SLV IA	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW	DES SLV IA	CABIN STOW	MDS CK	ERG STOW	RCMBNT SEAT S/U	LAUNCH ENTRY SUIT CK		

DAY/NIGHT	[Timeline bars for day/night cycle]																			
ORBIT	151	152	153	154	155	156	157	158	159											
TDRS	E	W	Z	[Timeline bars for TDRS events]																
GND	-MLA -MLA -DFR -MLA -DFR																			
ATTITUDE	-ZLV -XVV			FCS C/O			-ZLV -XVV			-XLV +YVV			-ZLV -XVV							
NOTES	*DECNFG *COOLING CNFG																			

FD11

GMT 11/22/09 (326)

MET Day 010

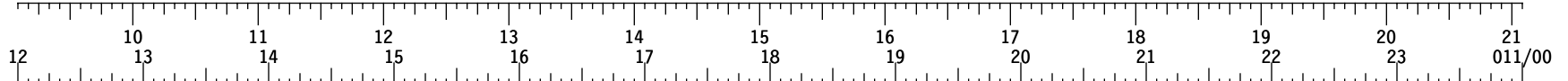


STS 129	CDR HOBAUGH	PRE SLEEP	PMC A/G	PRE SLEEP											SLEEP	FD12	POST SLEEP			
	PLT WILMORE				PRE SLEEP											SLEEP		POST SLEEP		
	MS1 MELVIN	KU STOW	PGSC STOW PART I				PRE SLEEP											SLEEP		POST SLEEP
	MS2 BRESNIK	KU STOW				PRE SLEEP	DISLVA											SLEEP		POST SLEEP
	MS3 FOREMAN	LAUNCH ENTRY SUIT CK				PRE SLEEP											SLEEP		POST SLEEP	
	MS4 SATCHER				PRE SLEEP	DISLVA											SLEEP		POST SLEEP	
	MS5 STOTT	LAUNCH ENTRY SUIT CK				PRE SLEEP	DISLVA											SLEEP		POST SLEEP
DAY/NIGHT		[Timeline with shaded day/night segments]																		
ORBIT		159 160 161 162 163 164 165 166 167																		
TDRS		[Timeline with E, W, Z activity bars]																		
GND		-DFR -MLA -DFR -MLA -DFR -MLA -DFR -MLA -DFR																		
ATTITUDE		-ZLV -XVV																		
NOTES																				

FD12

GMT 11/23/09 (327)

MET Day 010



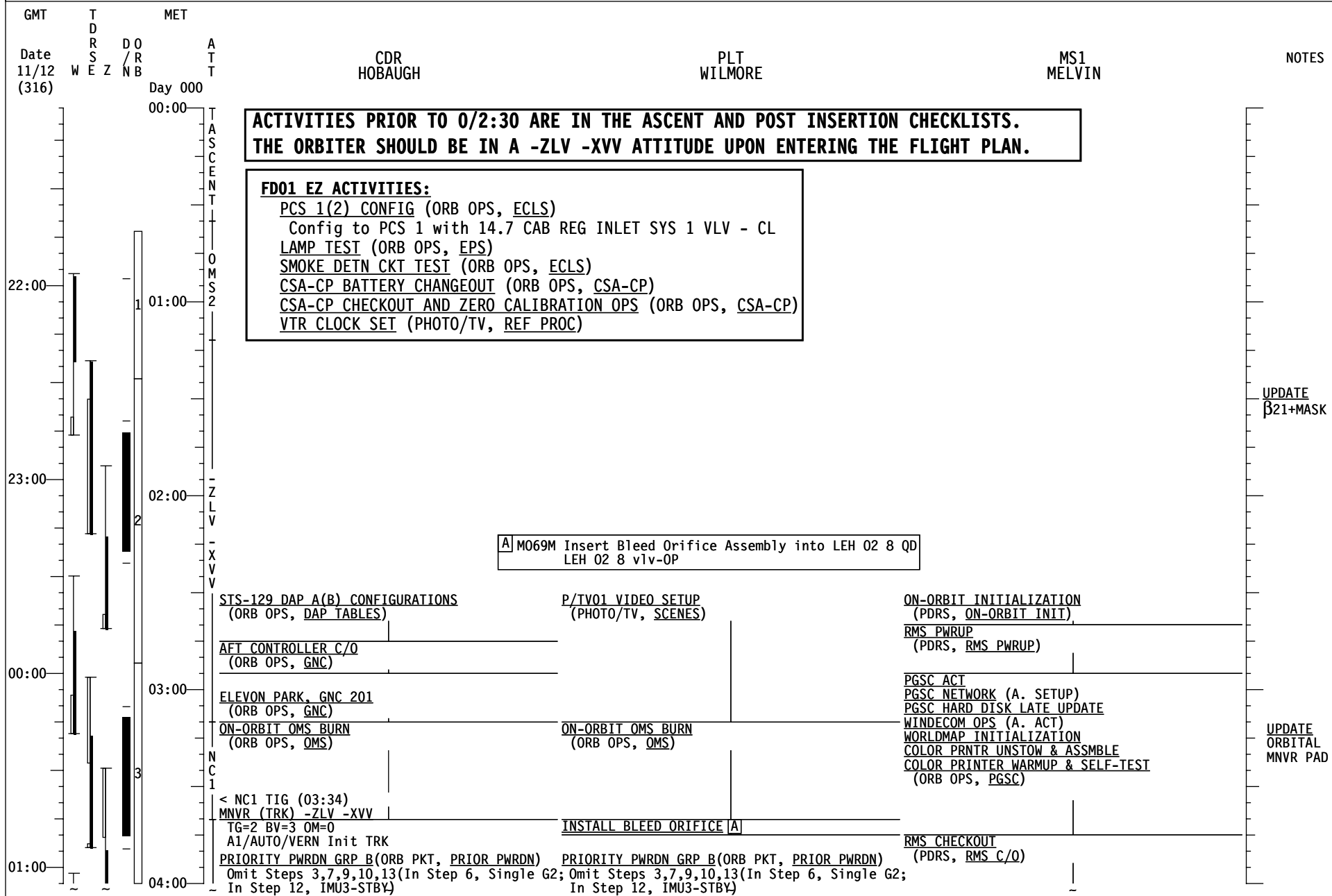
STS 129	CDR HOBAUGH	POST SLEEP	PSM OLAR GPT RUP IMU ALIGN & VERIF	T R X S I	DEORBIT PREP				
	PLT WILMORE	POST SLEEP	G R W D P R U L E N	M A T C H	DEORBIT PREP	D E O R B I T * L A N D I N G *			
	MS1 MELVIN	POST SLEEP	M D K C K	P G S C A S T O W T P A R T I I	W A T C H		DEORBIT PREP		
	MS2 BRESNIK	POST SLEEP	O S T A O C W		W A T C H		DEORBIT PREP		
	MS3 FOREMAN	POST SLEEP	D T O 6 9 6 A I R S M P		W A T C H		DEORBIT PREP		
	MS4 SATCHER	POST SLEEP	T P E W P R C D N	G I T R O W *	S T O W *		W A T C H	DEORBIT PREP	
	MS5 STOTT	POST SLEEP	M D S C K		W A T C H		DEORBIT PREP		
DAY/NIGHT	[Timeline bars for Day/Night]								
ORBIT	[Timeline bars for Orbit 167-175]								
TDRS	[Timeline bars for TDRS E, W, Z]								
GND	[Timeline bars for GND activities: -MLA, -DFR, -MLA, -DFR]								
ATTITUDE	[Timeline bars for Attitude: -ZLV, -XVV, IMU, -XSI, COMM, ENTRY]								
NOTES	*SALIVA KIT DEORBIT TIG 10/18:24* *KSC LANDING 10/19:27								

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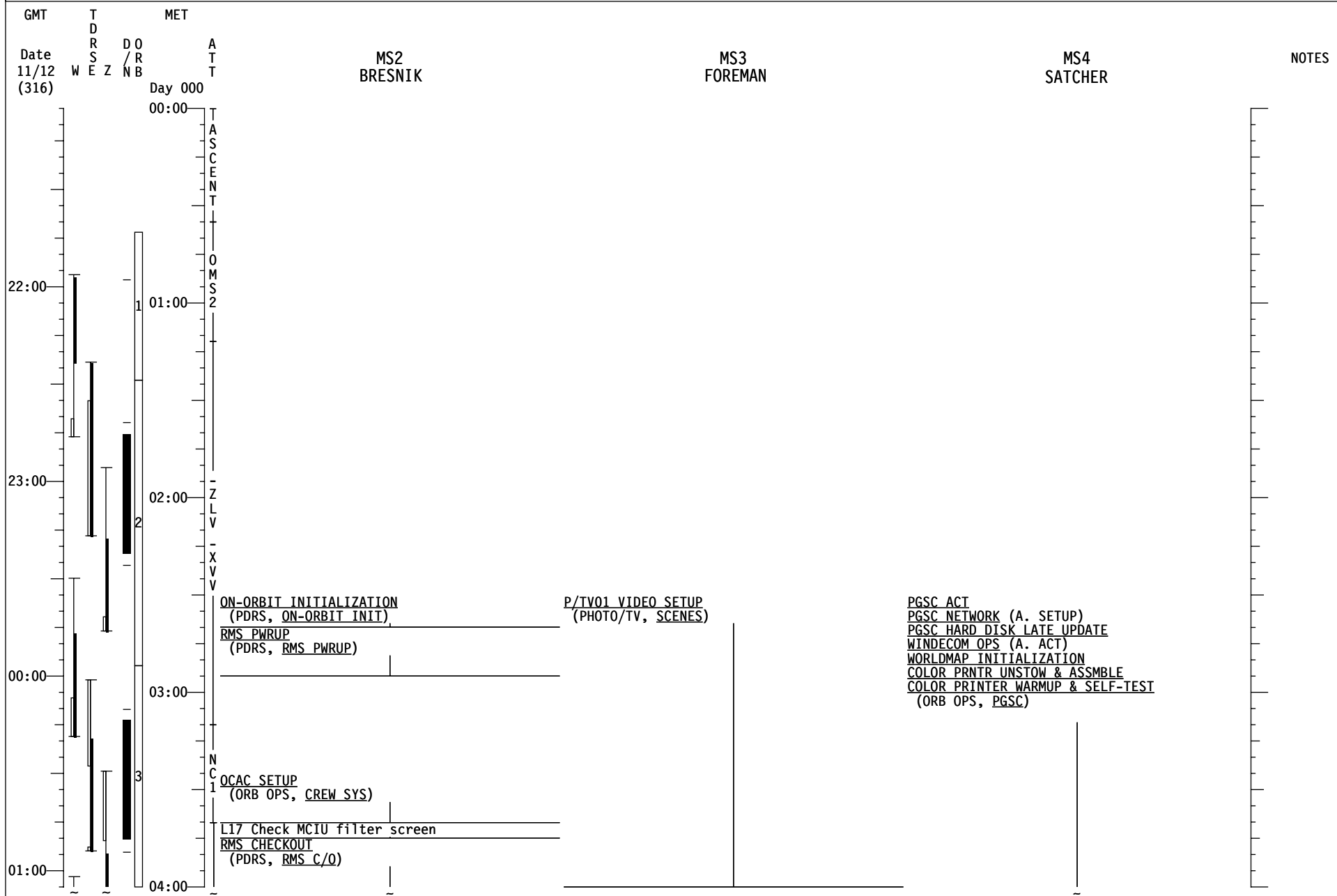
DETAILED TIMELINE

DETAILED
TIMELINE

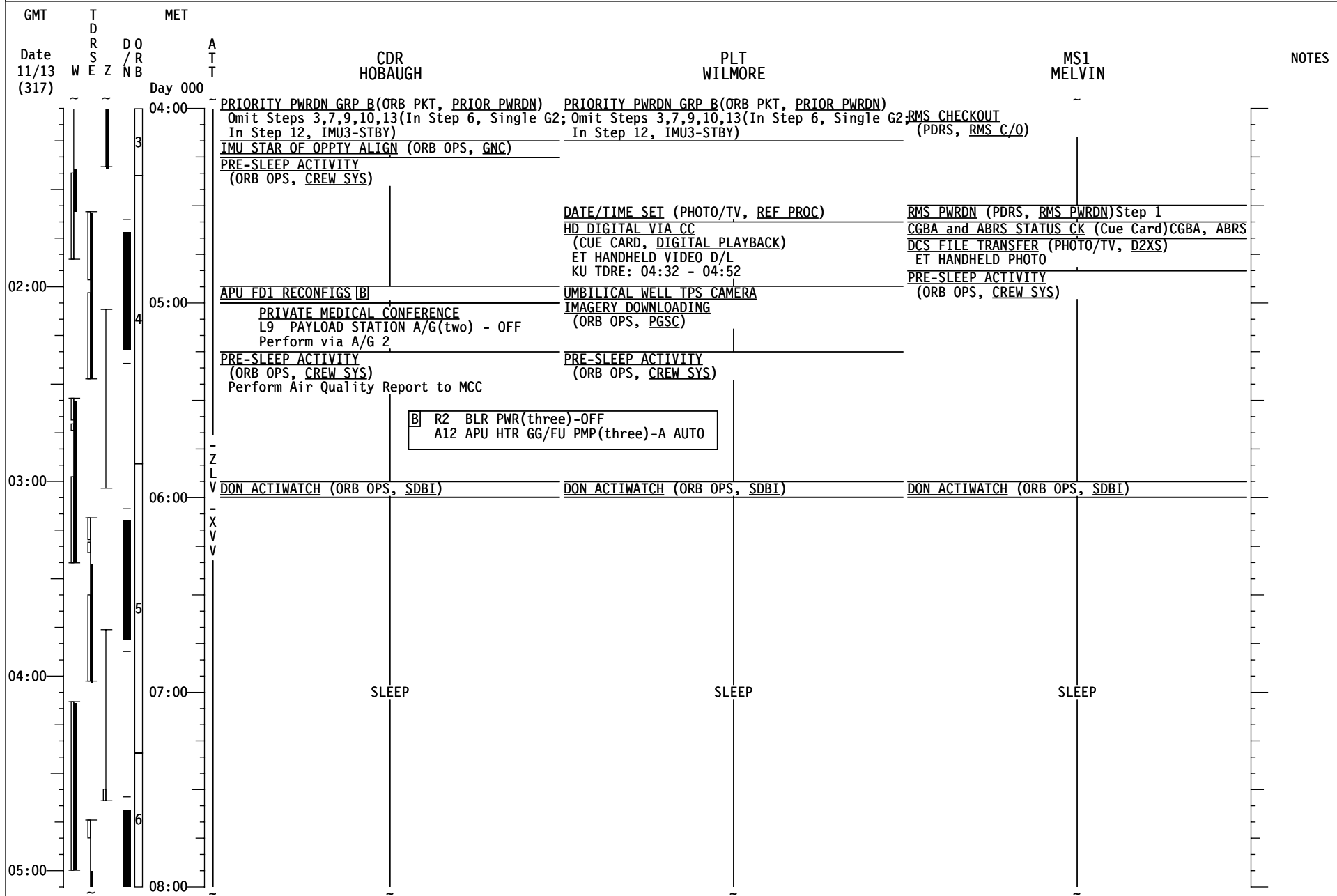
STS-129/ULF3 FD01



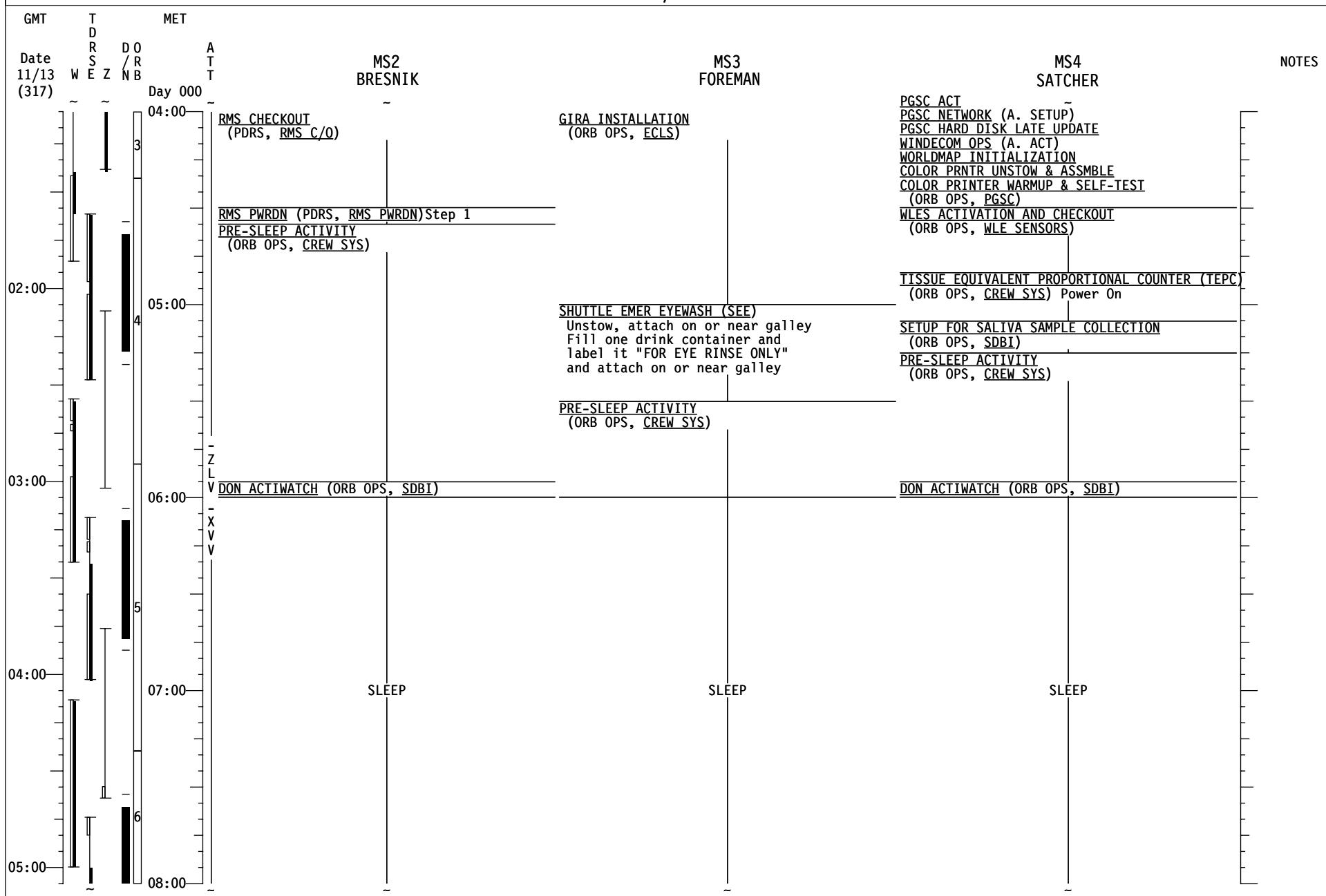
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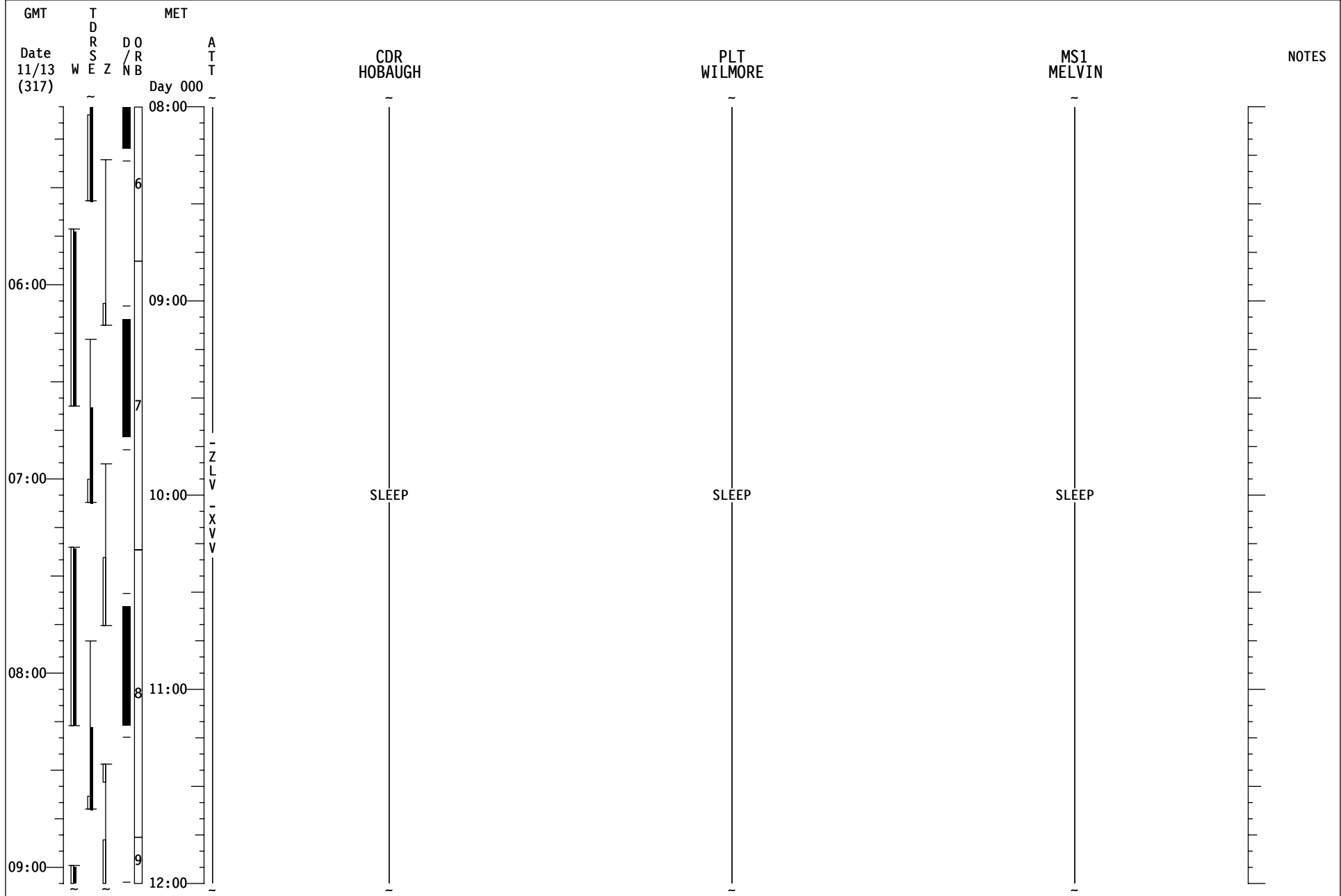
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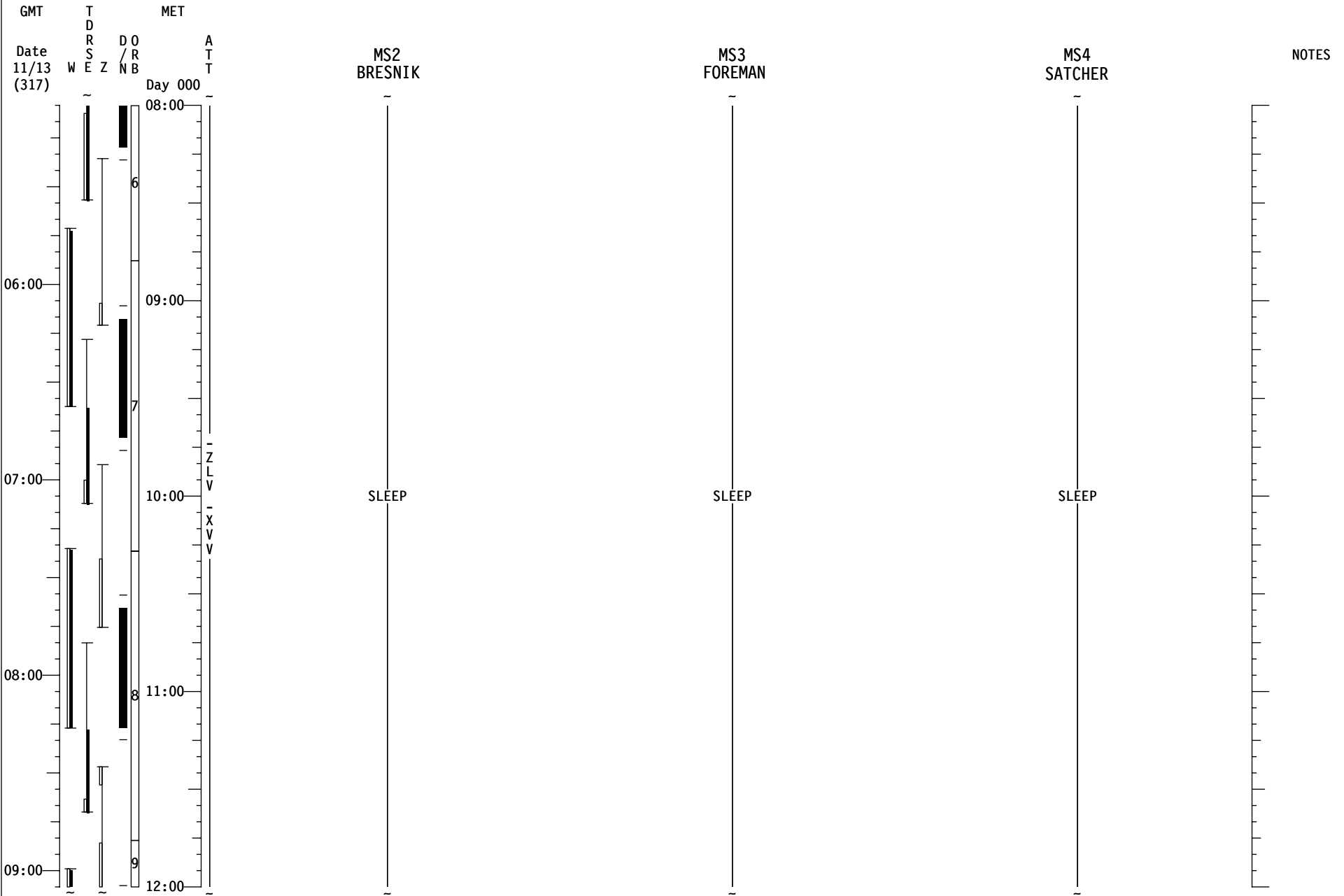
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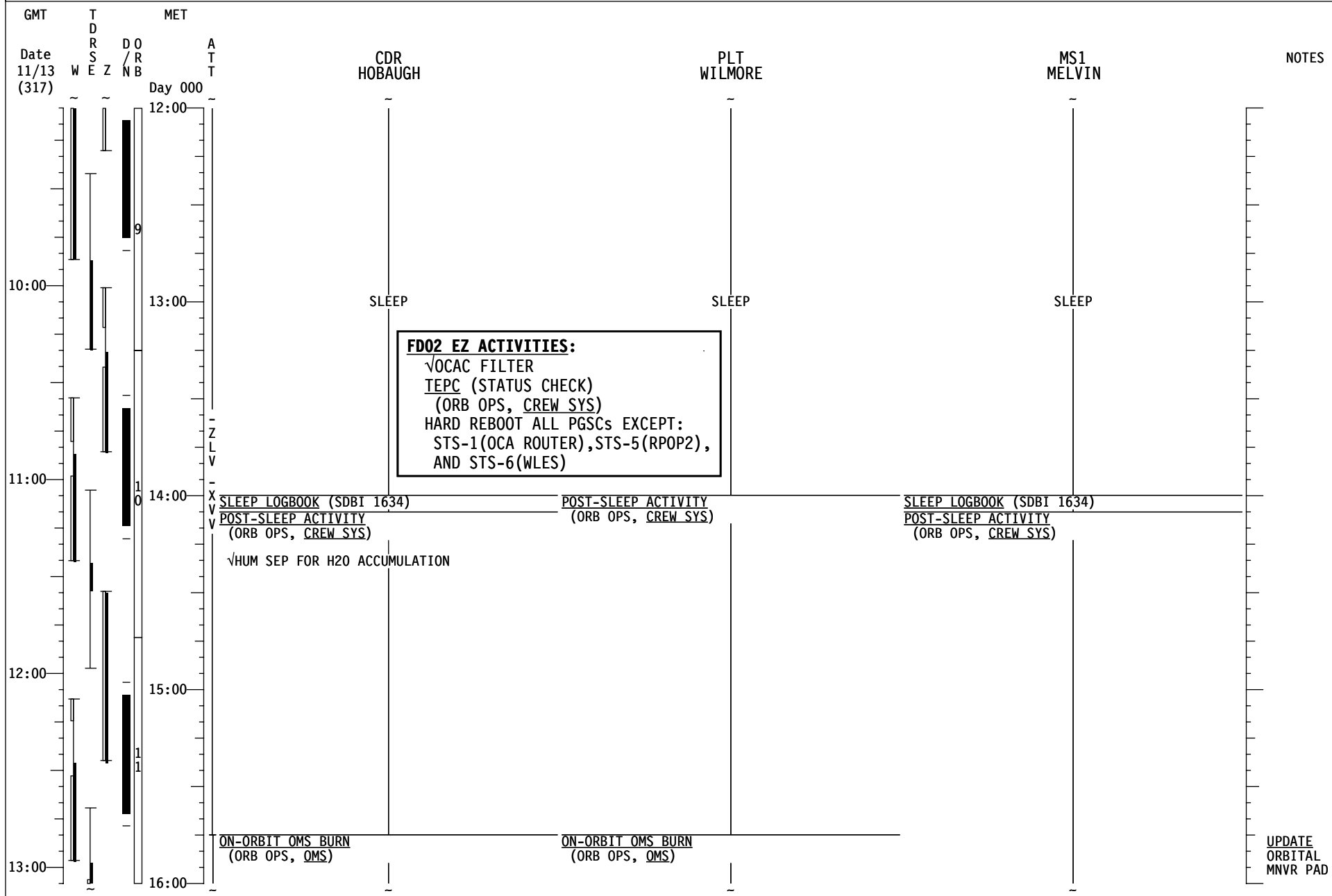
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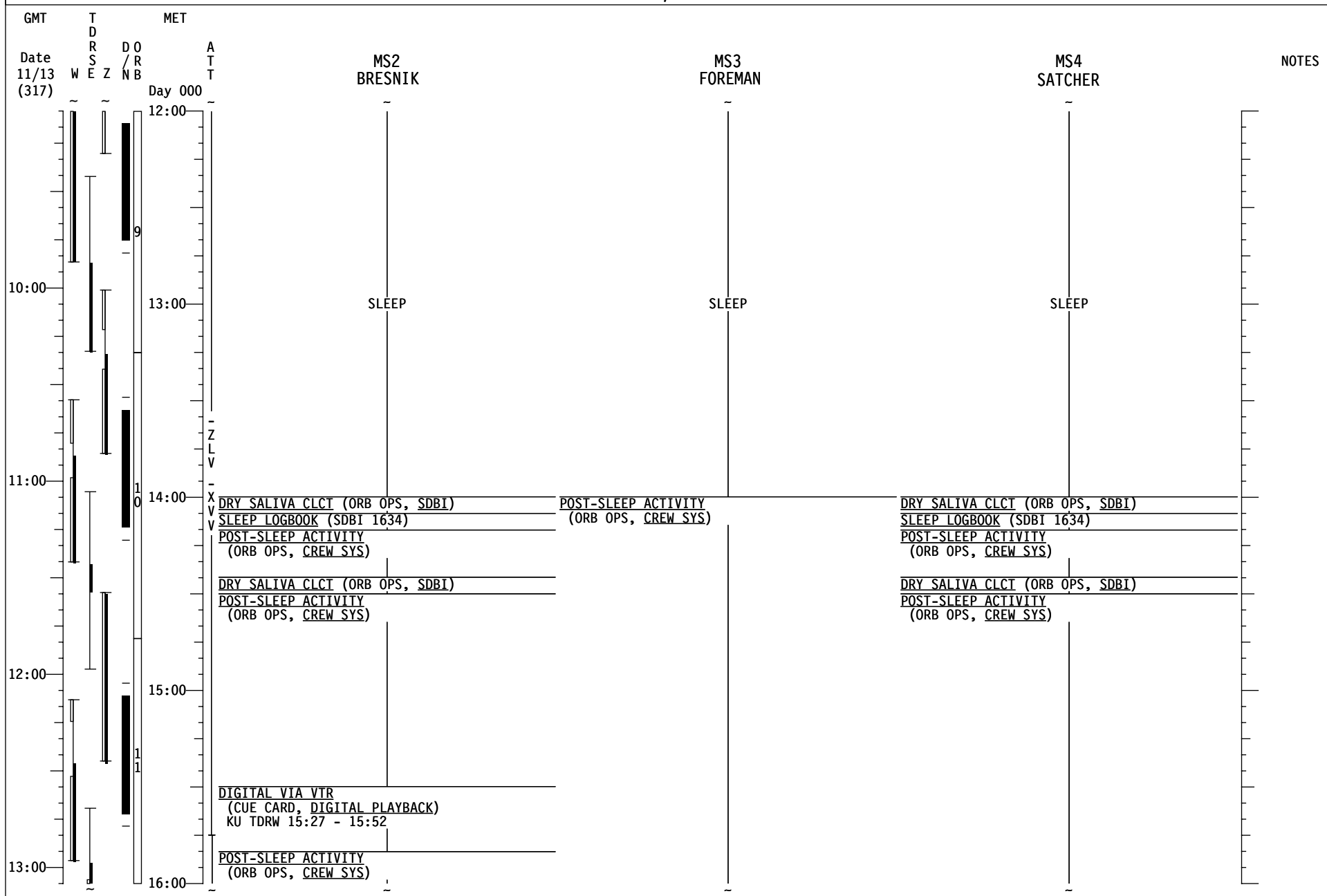
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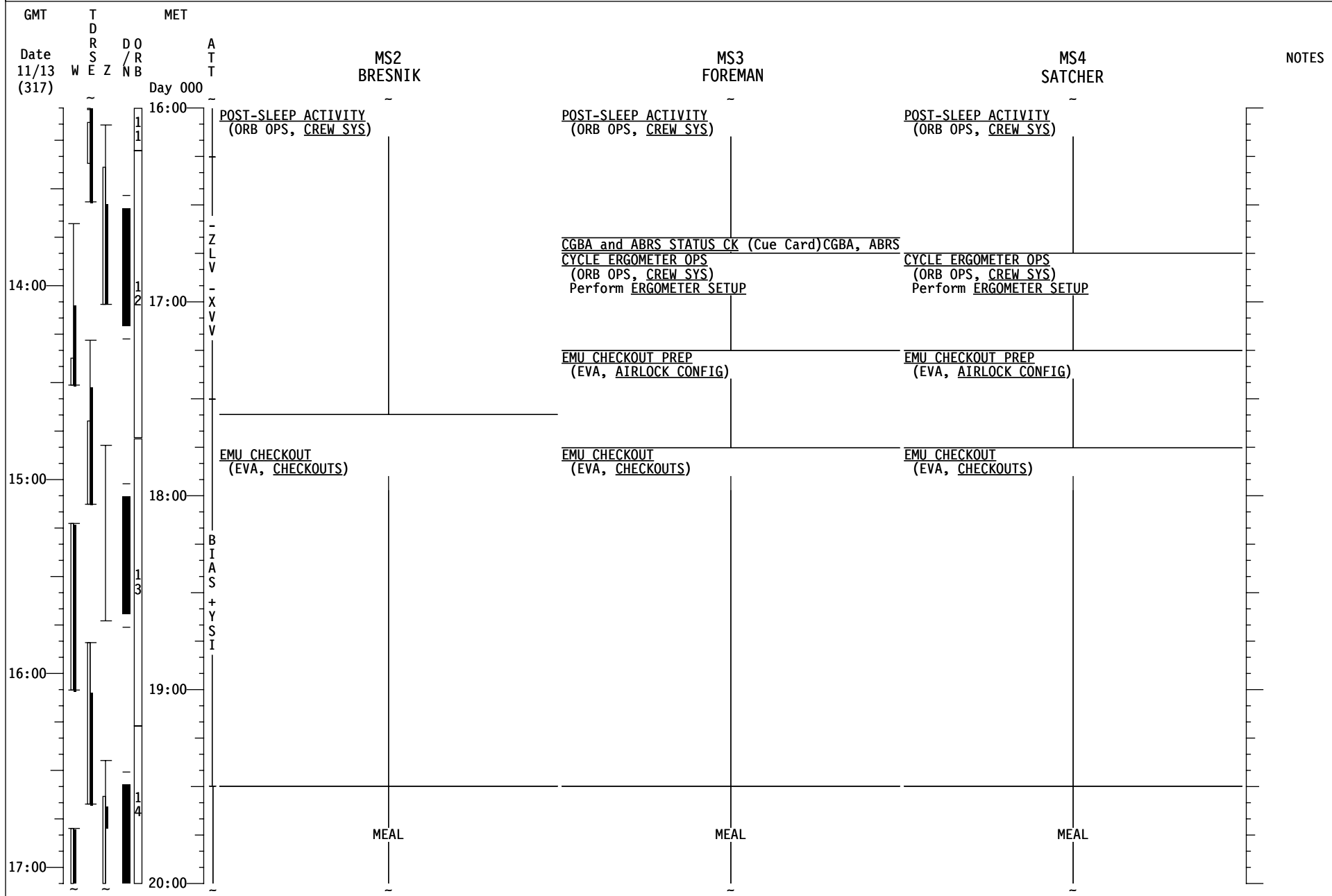
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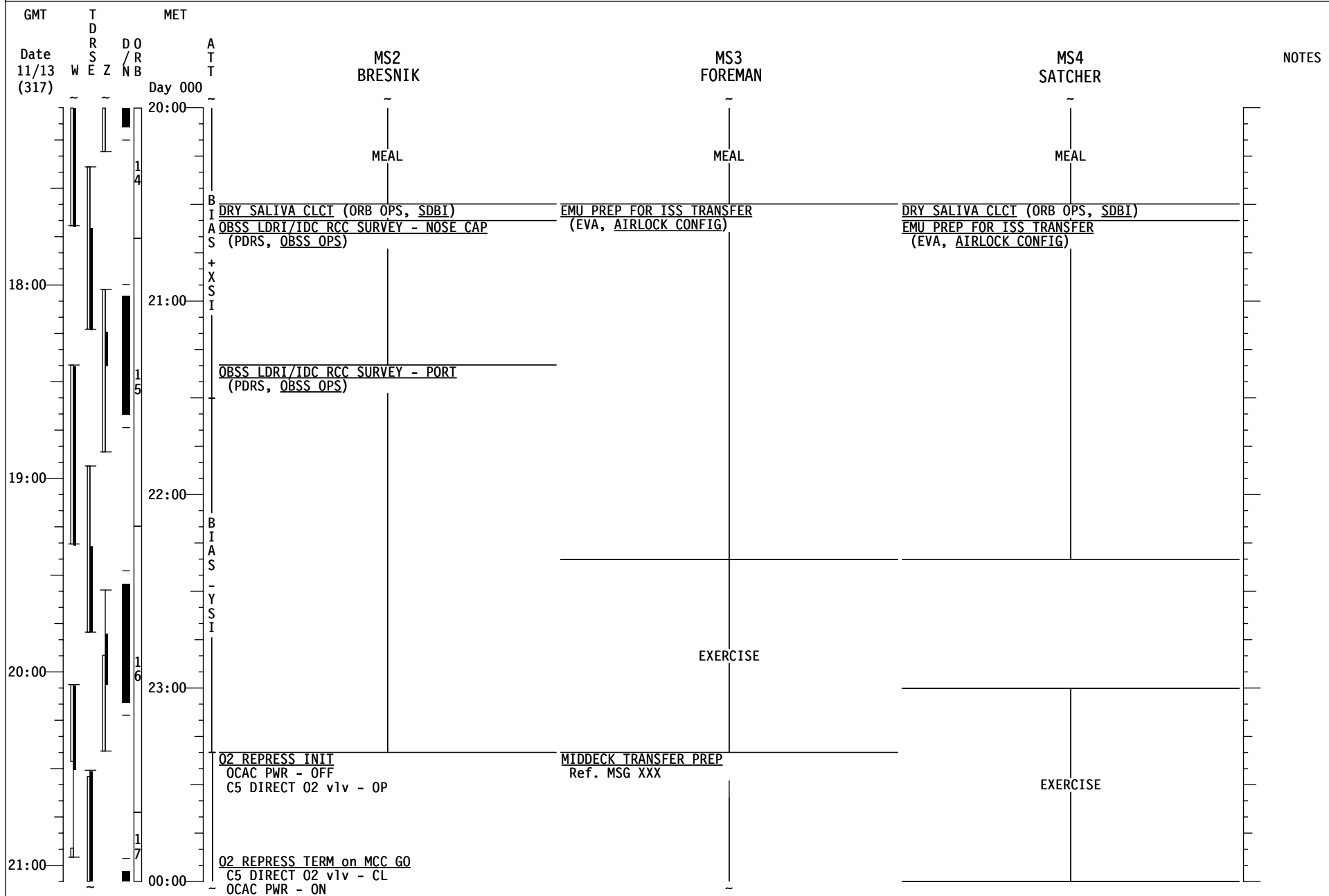
STS-129/ULF3 FD02



STS-129/ULF3 FD02



STS-129/ULF3 FD02



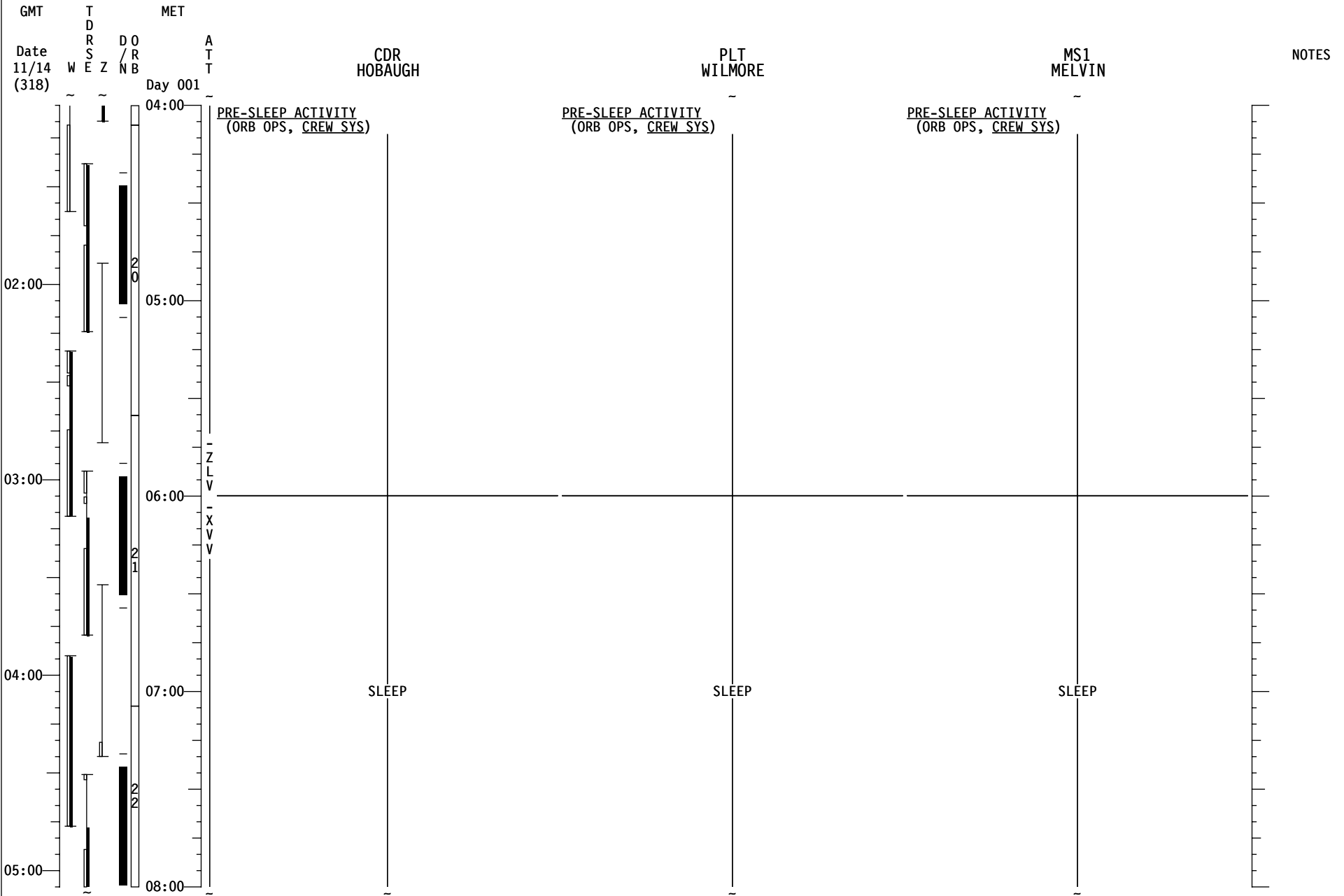
STS-129/ULF3 FD02

GMT	T D R S W E Z	MET D O / R N B Day 001	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
00:00							
					OBSS BERTH (PDRS, OBSS OPS) Steps 1-8	OBSS BERTH (PDRS, OBSS OPS) Steps 1-8	
						ELC 1 GRAPPLE (PDRS, ELC NOM OPS)	
22:00				C/L CAMR INSTALL (PHOTO/TV, REF PROC) Setup & Align C/L Camera	C/L CAMR INSTALL (PHOTO/TV, REF PROC) Setup & Align C/L Camera		
					FCMS OPS (ORB OPS, EPS)	DOCKING MECH INITIALIZATION DOCKING MECH POWERUP DOCKING RING EXTENSION DOCKING MECH POWERDOWN (RNDZ, APDS)	
				EXERCISE		RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)	UPDATE TFL 192
23:00					EXERCISE	B DAP: FREE L,R RCS TK ISOL (six)-CL(tb-CL) XFEED (four)-OP(tb-OP) L OMS XFEED B-OP(tb-OP) B-CL(tb-CL) R OMS XFEED B-OP(tb-OP) B-CL(tb-CL) L,R RCS XFEED (four)-CL(tb-CL) TK ISOL (six)-OP(tb-op) DAP: AUTO	
				O/S/RCS VALVE TEST IB			
				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC			
					PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		UPDATE TFL 188
00:00				ON-ORBIT +X RCS BURN (ORB OPS, RCS)	ON-ORBIT +X RCS BURN (ORB OPS, RCS)	CGBA and ABRs STATUS CK (Cue Card)CGBA, ABRs	UPDATE ORBITAL MNVr PAD
						PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
				< NC3 TIG (03:22)			
				MNVr (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
				FUTURE LOADED MNVR (TRK) -ZLV +YVV (DUMP) C	C FUTURE LOADED MNVR (TRK) -ZLV +YVV (DUMP) TG=2 BV=3 OM=270 A1/AUTO/VERN (1/14:10) Init TRK		
01:00				PRIVATE MEDICAL CONFERENCE L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2			
04:00							

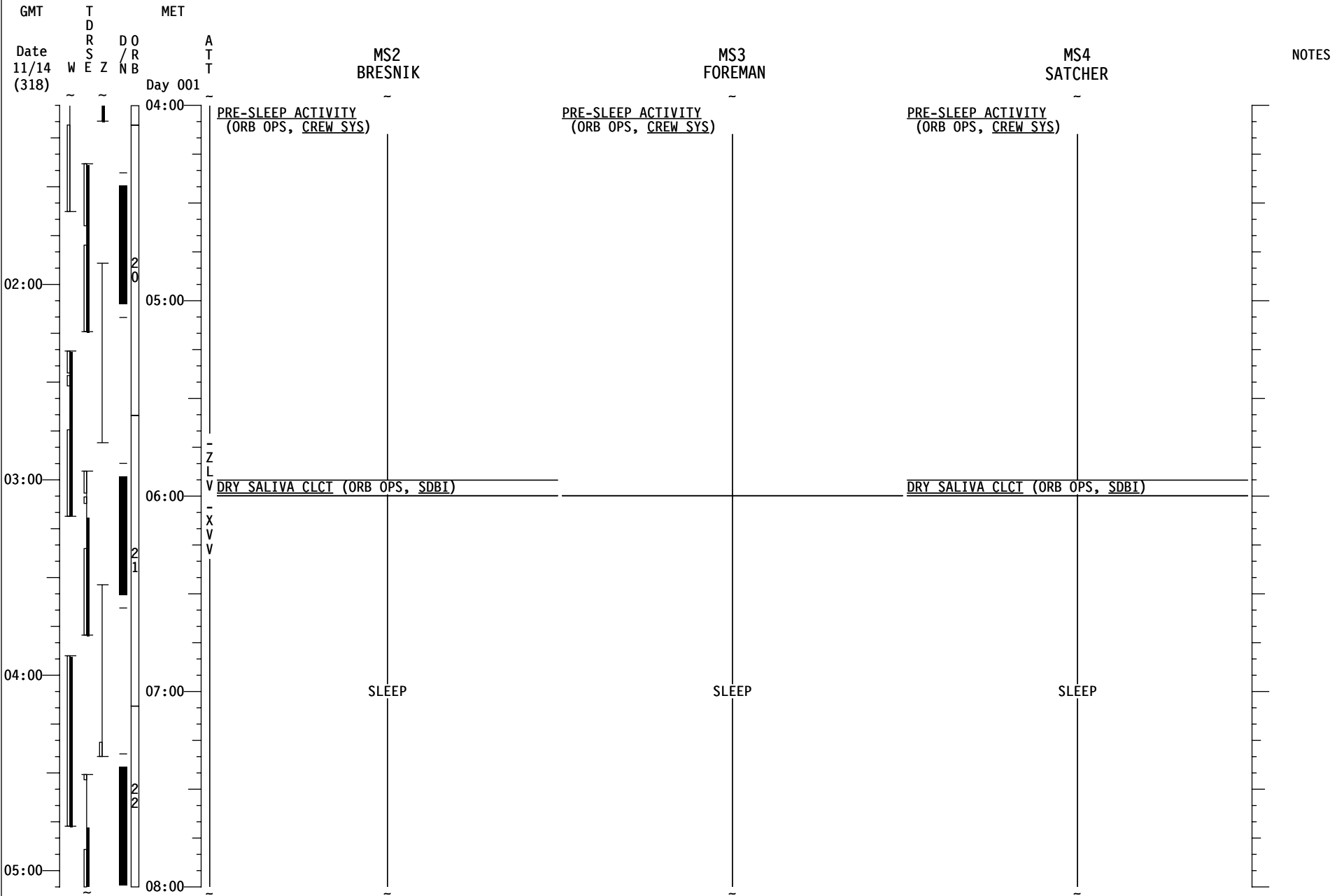
STS-129/ULF3 FD02

GMT	T D R S W E Z	MET	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
Date 11/13 (317)		Day 001					
		00:00		DRY SALIVA CLCT (ORB OPS, SDBI)	MIDDECK TRANSFER PREP Ref. MSG XXX	DRY SALIVA CLCT (ORB OPS, SDBI)	
				ELC 1 GRAPPLE (PDRS, ELC NOM OPS)			
				P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) OMS POD SURVEY Setup, Step 1; OPS, Item 1 Best Lighting : 00:38 - 01:16			
22:00		01:00		DOCKING MECH INITIALIZATION DOCKING MECH POWERUP DOCKING RING EXTENSION DOCKING MECH POWERDOWN (RNDZ, APDS)	DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) LDRI SURVEYS KU TDRE 1:03 - 1:57		
				X RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)		NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS 1-8 (Cells 2)	
23:00		02:00				NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS A-F (Vaccine 6) Steps 2,6,11	
						[D] After LDRI Playback complete, RECONFIGURE OCA D/L RATE (PL Max) (ORB OPS, PGSC) Part C, omit Step 4	
00:00		03:00		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	RECONFIGURE OCA DOWNLINK RATE [D] PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
01:00		04:00					

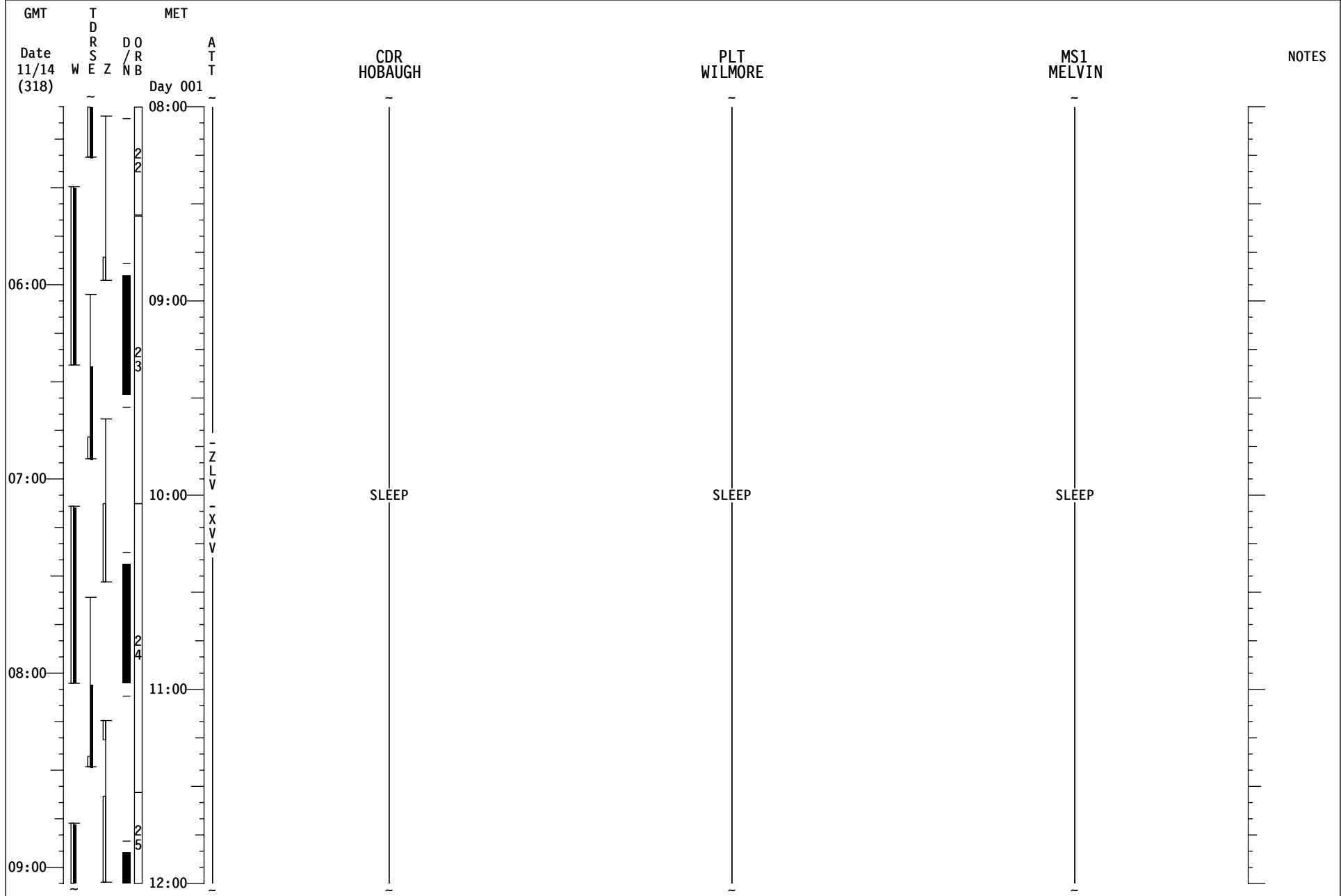
STS-129/ULF3 FD02



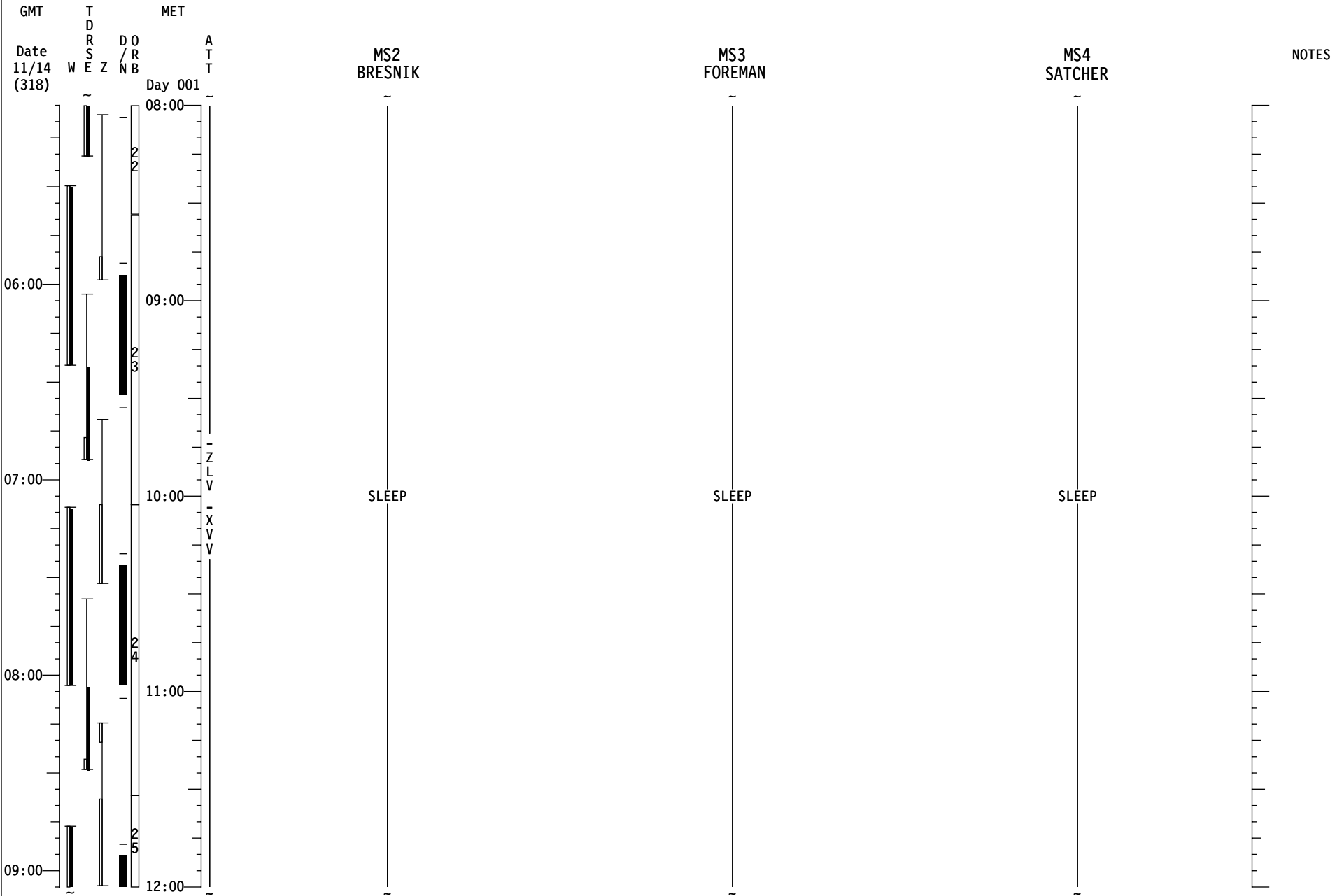
STS-129/ULF3 FD02



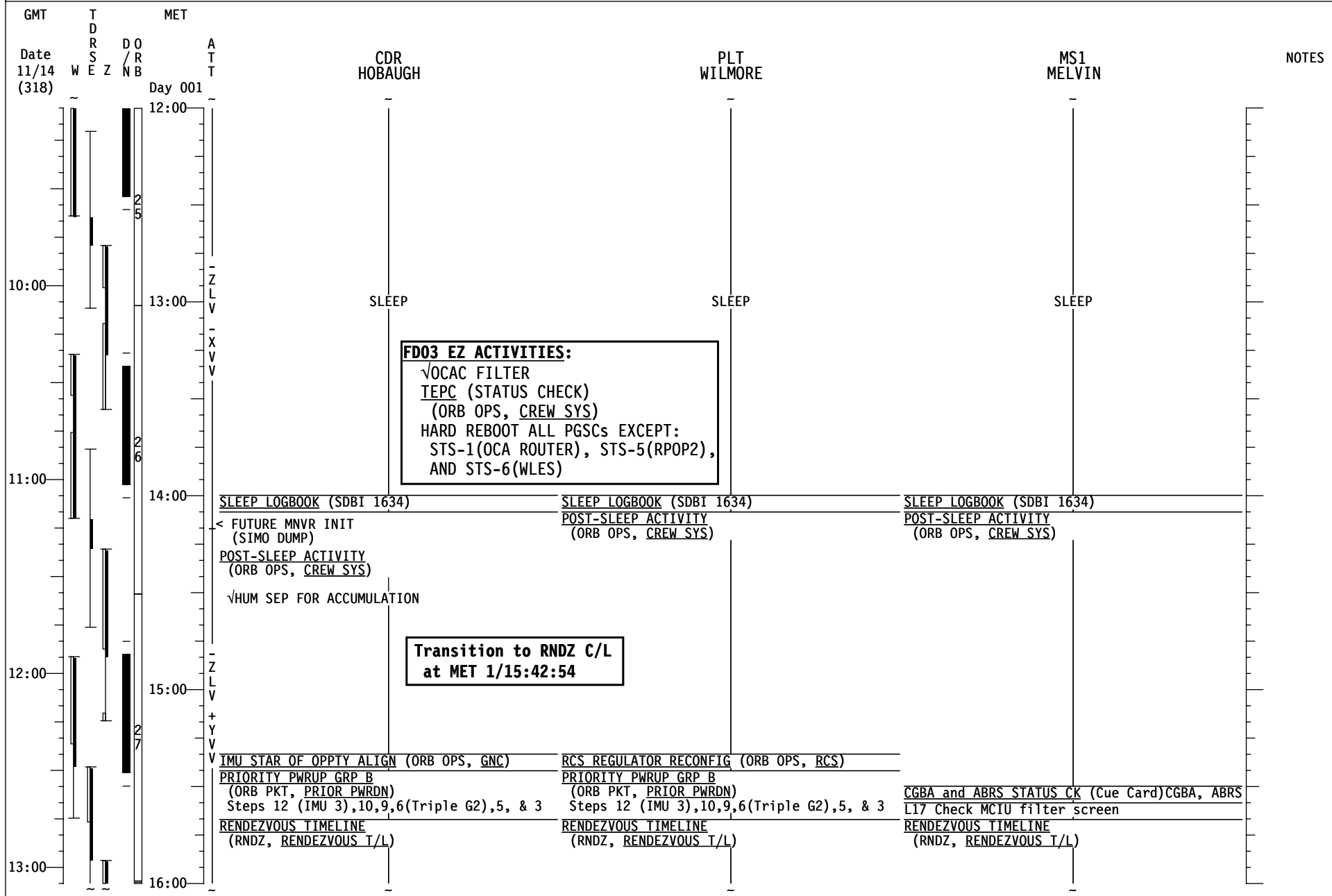
STS-129/ULF3 FD02



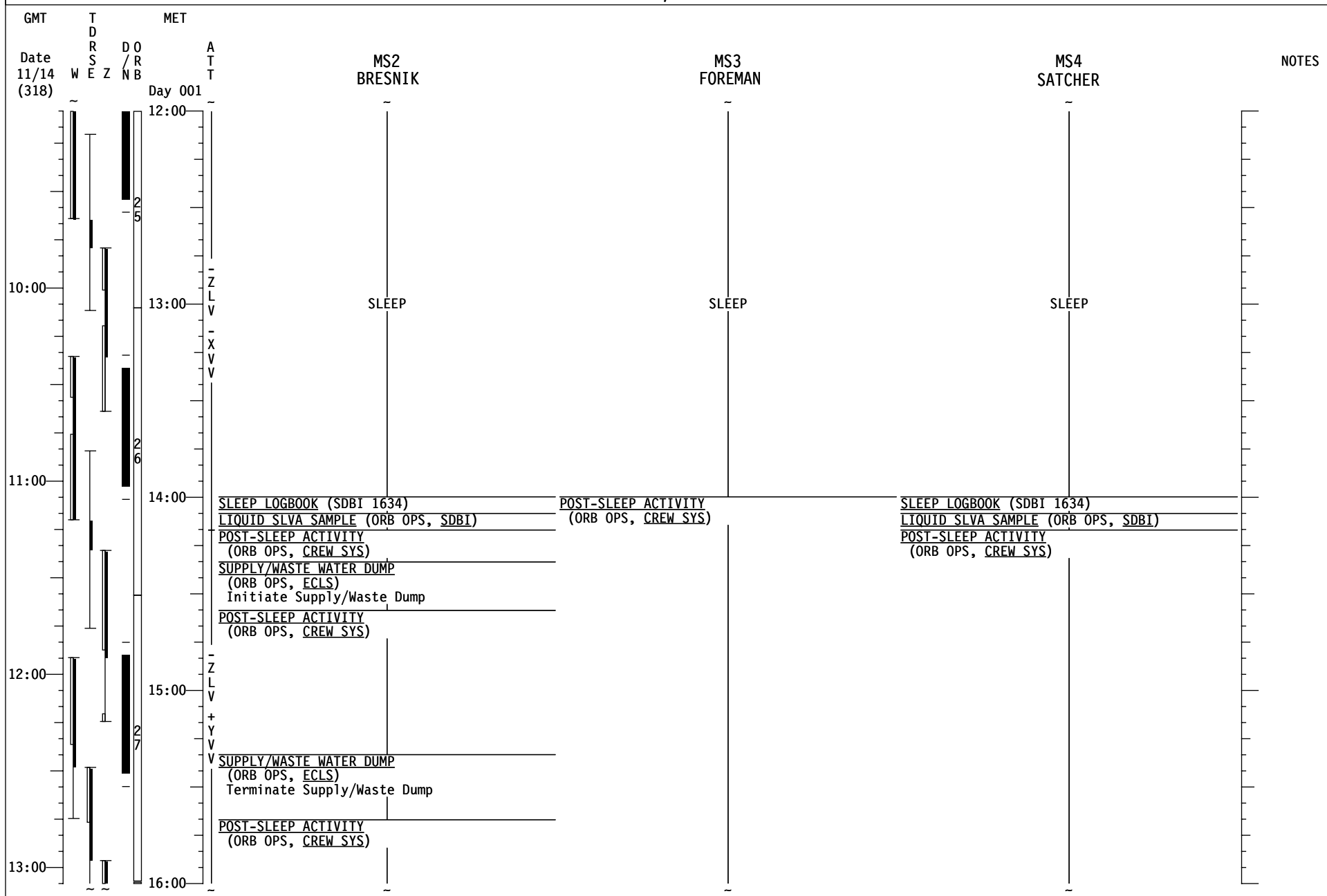
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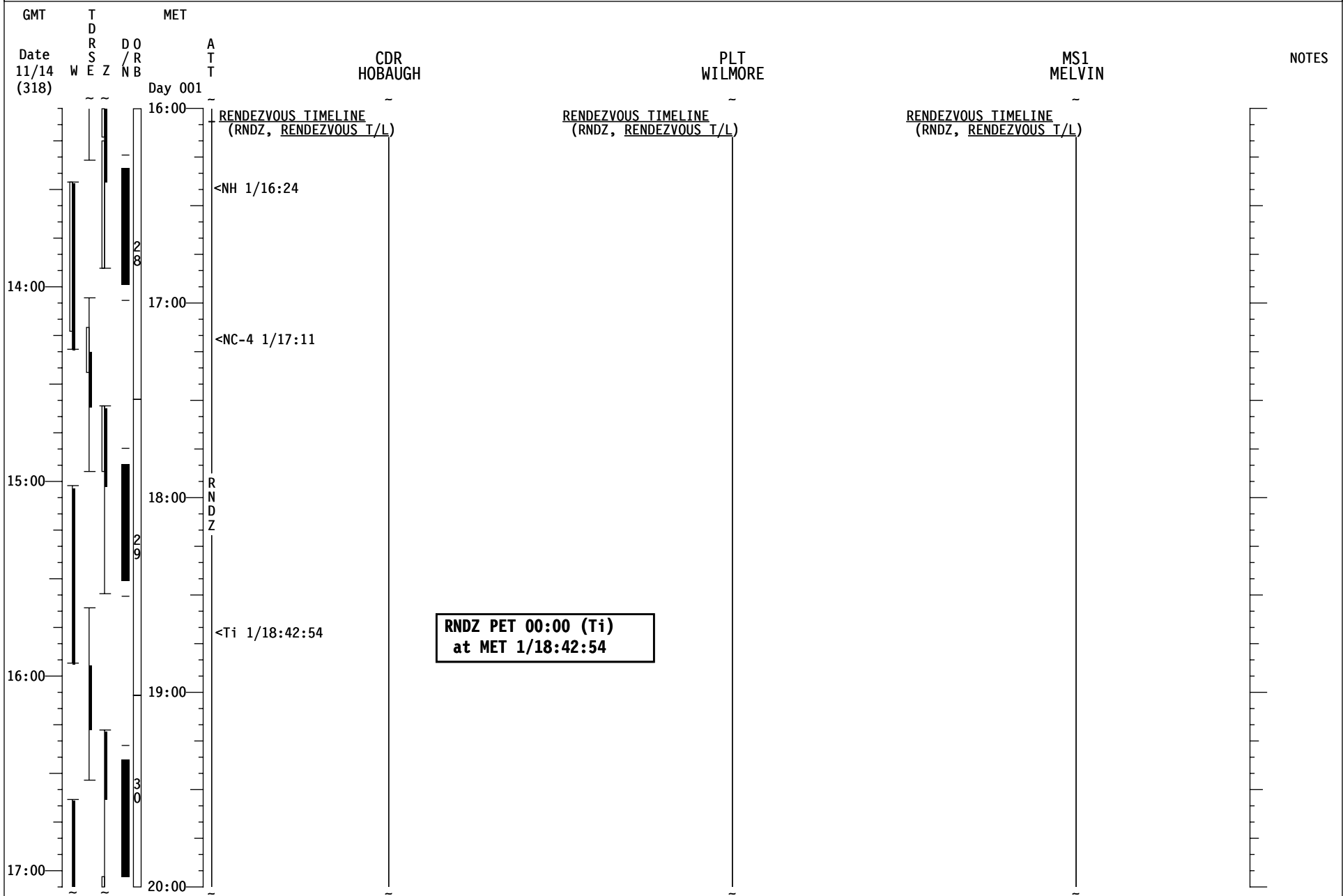
STS-129/ULF3 FD03



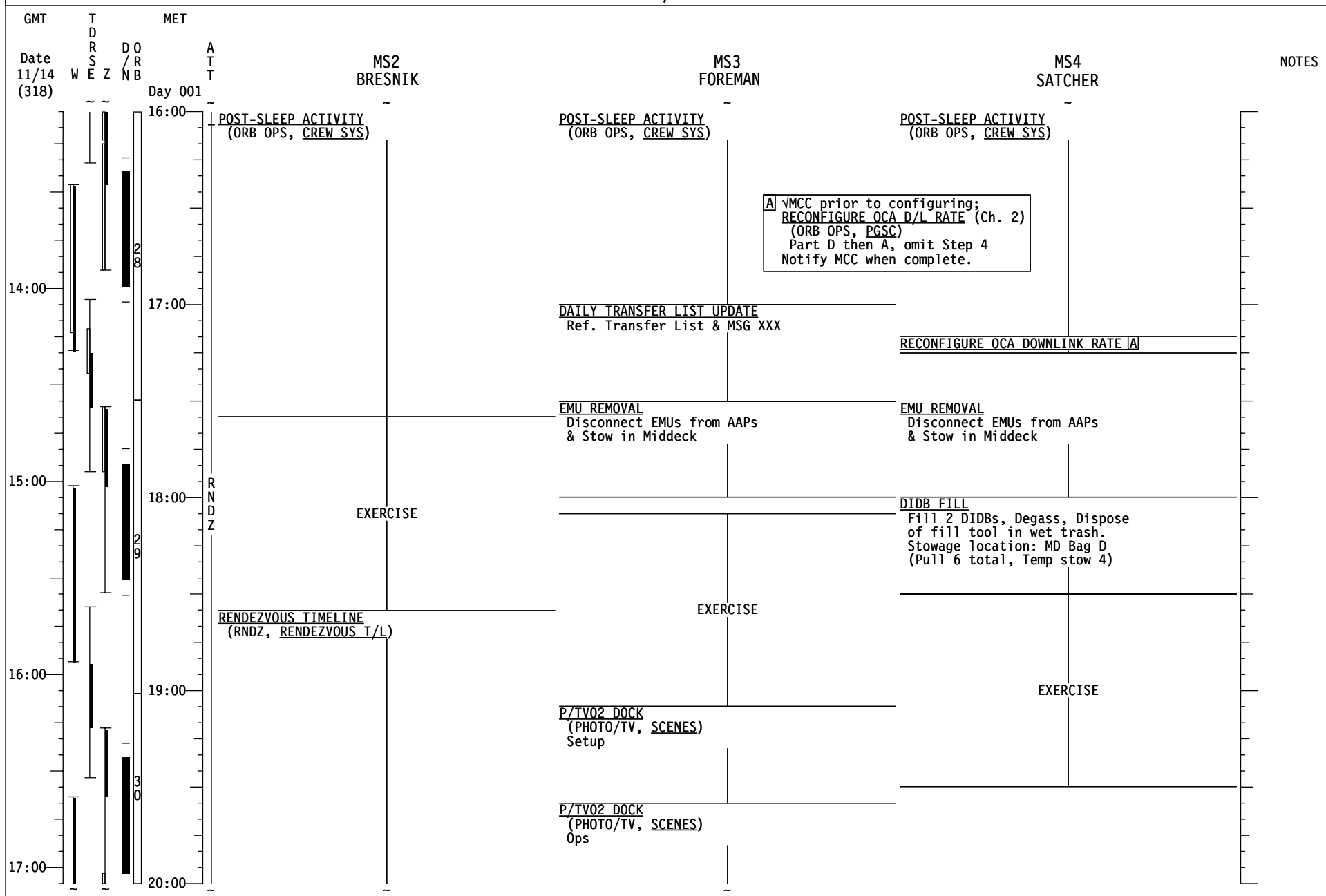
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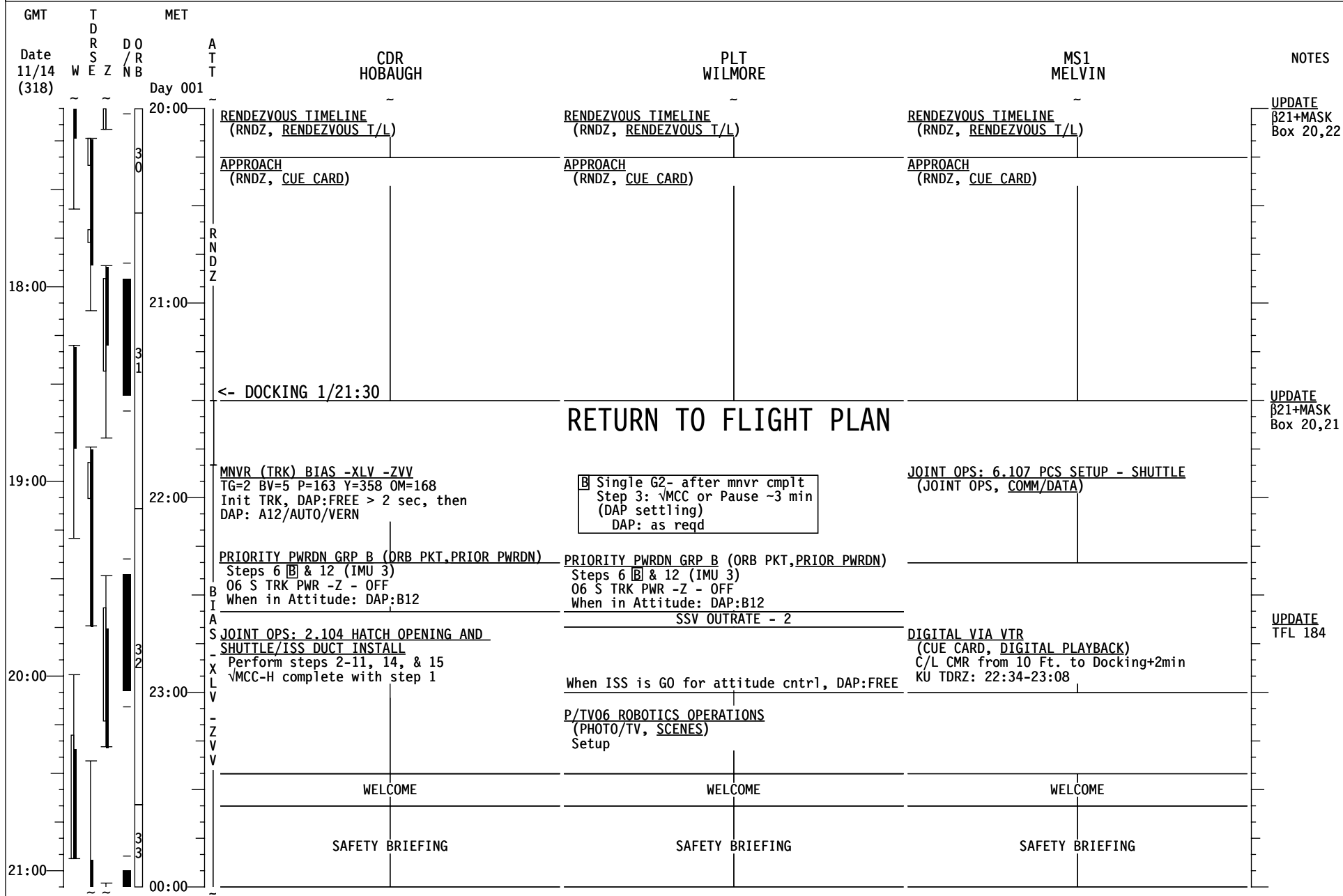
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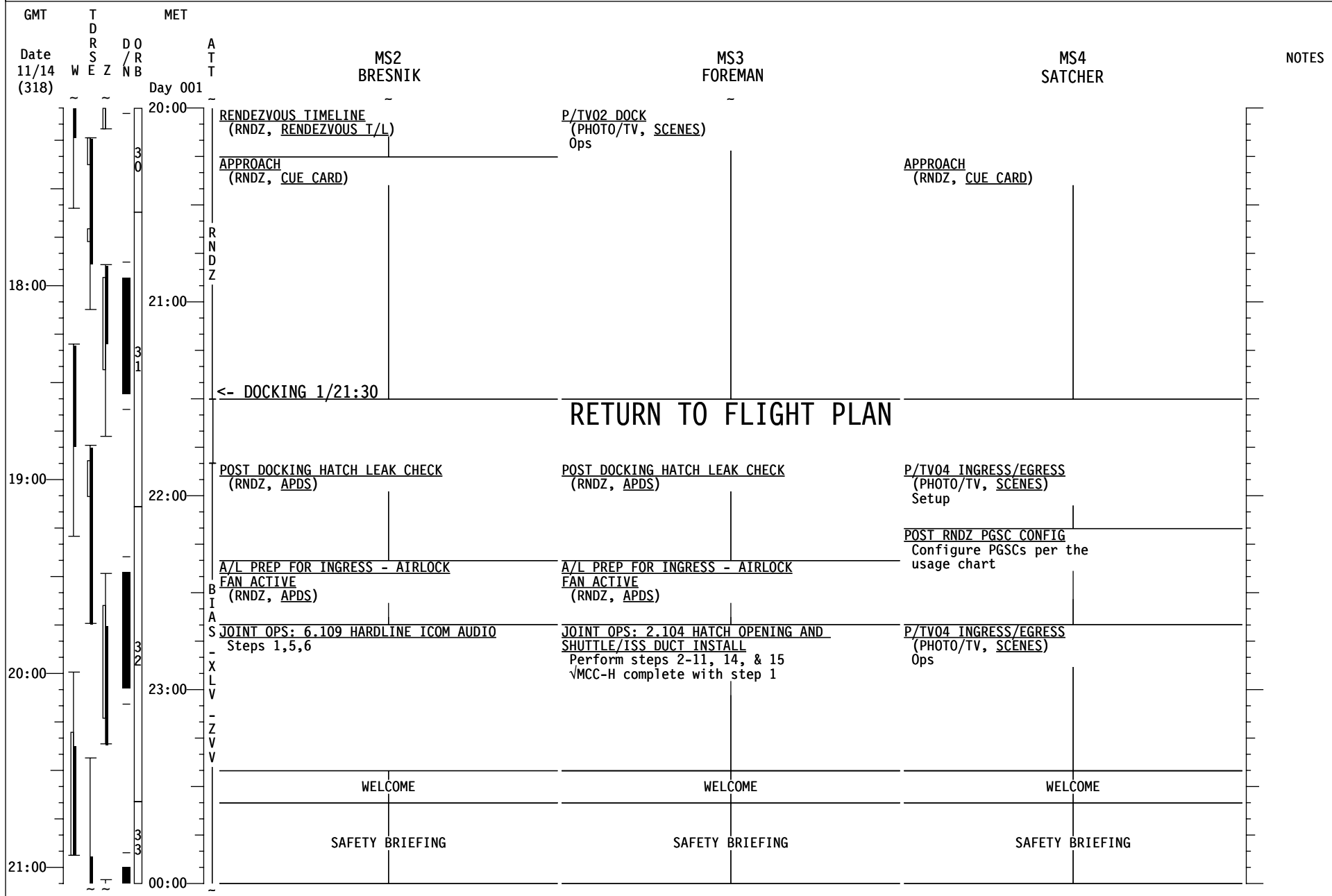
STS-129/ULF3 FD03



STS-129/ULF3 FD03



STS-129/ULF3 FD03



STS-129/ULF3 FD03

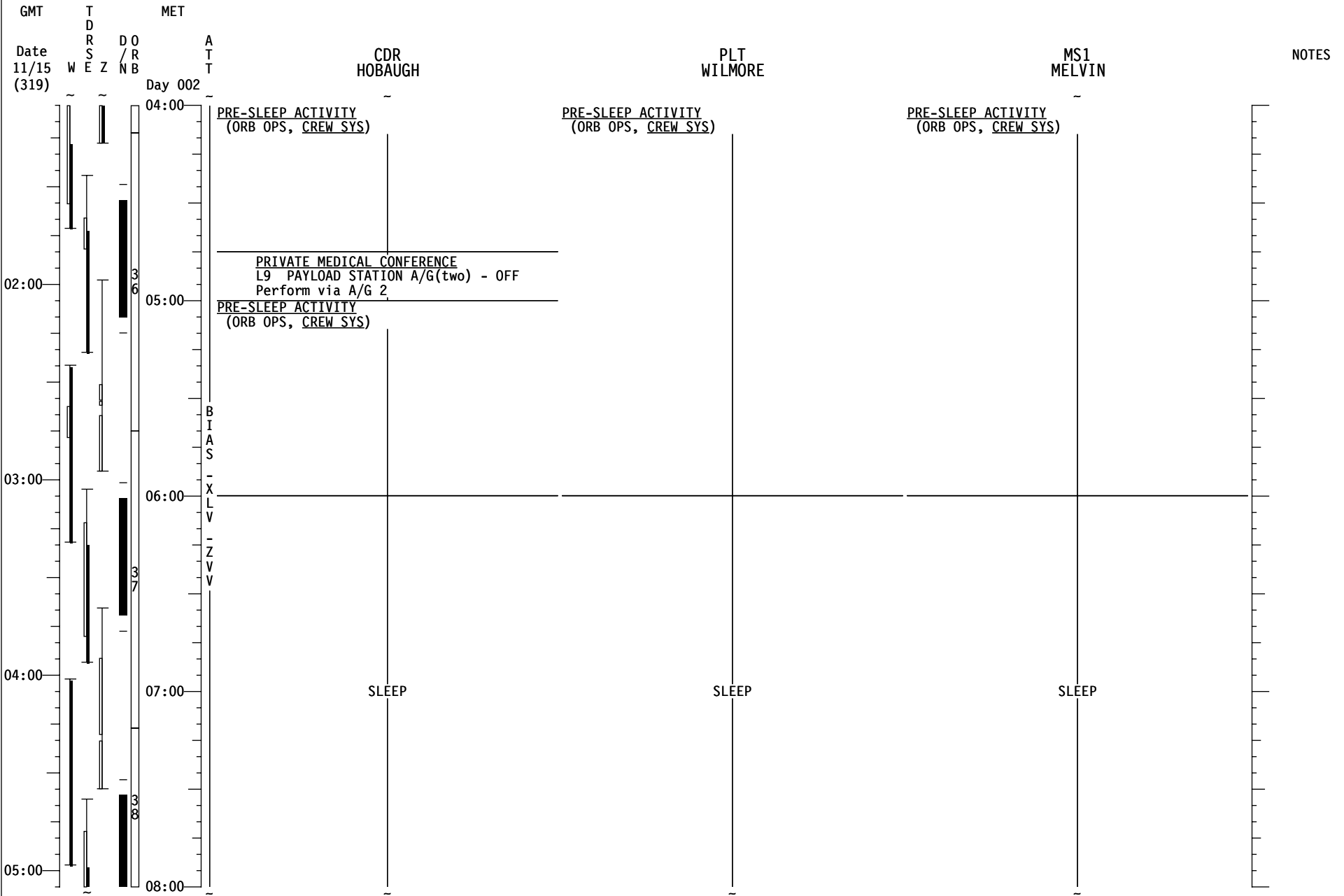
GMT	TDRS W E Z	MET DO R Z N B	A T T Day 002	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
00:00				SAFETY BRIEFING POST DOCKING EVA TRANSFER & RECONFIG (EVA, AIRLOCK CONFIG)	SAFETY BRIEFING P/TV05 ISS INTERNAL OPS (HC) (PHOTO/TV, SCENES) Setup	SAFETY BRIEFING ELC 1 UNBERTH (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT	NO EXERCISE UNTIL @ HOVER POSITION
22:00					ROBOTICS: 1.110 ELC1 HANDOFF AND INSTALL Steps 1-3 EXERCISE CONSTRAINT	NO EXERCISE WHILE ELC 1 GRAPPLLED BY RMS & SSRMS	
01:00				JOINT OPS: 3.102 NITROGEN TRANSFER INITIATION Setup and Initiate Verify MCC-H complete with Step 2, Then perform 3-4.3			ELC 1 UNGRAPPLE (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT
23:00				JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP Steps 4-6; Ground will perform 6.14	ROBOTICS: 1.110 ELC1 HANDOFF AND INSTALL Steps 4-8 EXERCISE CONSTRAINT	SODF TRANSFER Ref. Transfer List & MSG XXX	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
02:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #1 Ref. MSG XXX	S&M: 1.902 UCCAS NORMAL MATE Steps 6-17 EXERCISE CONSTRAINT	TRANSFER OPS XFR CTB prior to CERISE XFR Ref. Transfer List & MSG XXX	
00:00				EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)		EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
03:00				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	After ELC1 Install [C]	CGBA and ABRS STATUS CK (Cue Card)CGBA, ABRS CERISE TRANSFER Ref. Transfer List & MSG XXX	
01:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION	EXERCISE	TRANSFER TAGUP Coordinate with transfer counterparts	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
04:00				CWC TRANSFER Transfer # CWCs to ISS		TRANSFER BRIEF Call down status to MCC	
				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

C | √ A/FREE/VERN
PERMANENT DAP EDIT: A11: CA=6
A12: CA=6
B12: CA=6
B13: CA=6

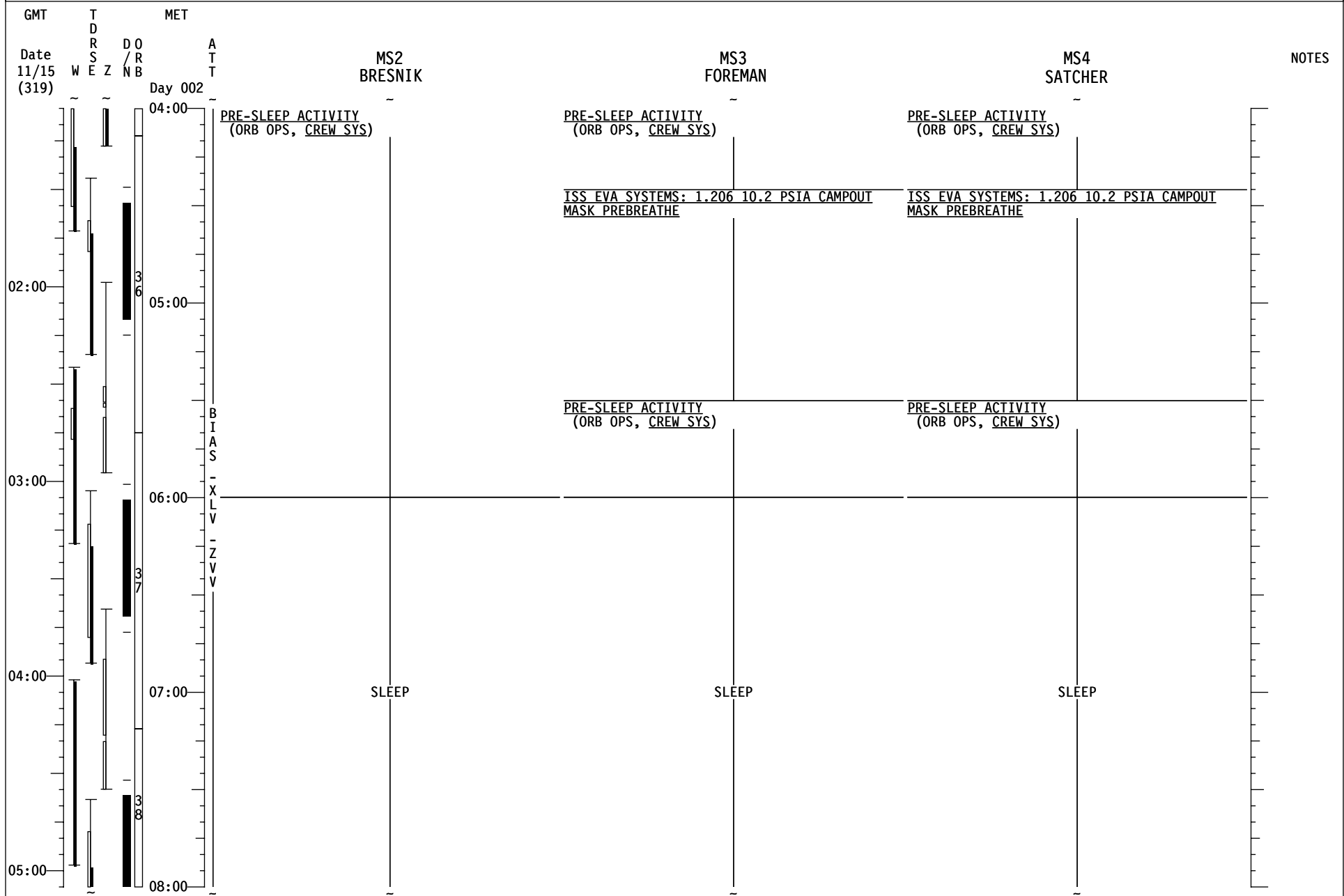
STS-129/ULF3 FD03

GMT	T D R S W E Z	MET	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
Date 11/14 (318)		Day 002					
00:00				SAFETY BRIEFING ELC 1 UNBERTH (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT	SAFETY BRIEFING EVA 1 TOOL CONFIG (EVA, TIMELINES)	SAFETY BRIEFING EVA 1 TOOL CONFIG (EVA, TIMELINES)	NO EXERCISE UNTIL @ HOVER POSITION
22:00				ELC 1 UNGRAPPLE (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT EVA 1 TOOL CONFIG (EVA, TIMELINES)			NO EXERCISE WHILE ELC 1 GRAPPLED BY RMS & SSRMS
23:00					ISS EVA SYS: 1.305 EQUIPMENT LOCK PREP Review emergency equipment locations	ISS EVA SYS: 1.305 EQUIPMENT LOCK PREP Review emergency equipment locations	
00:00				EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
01:00				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
04:00							

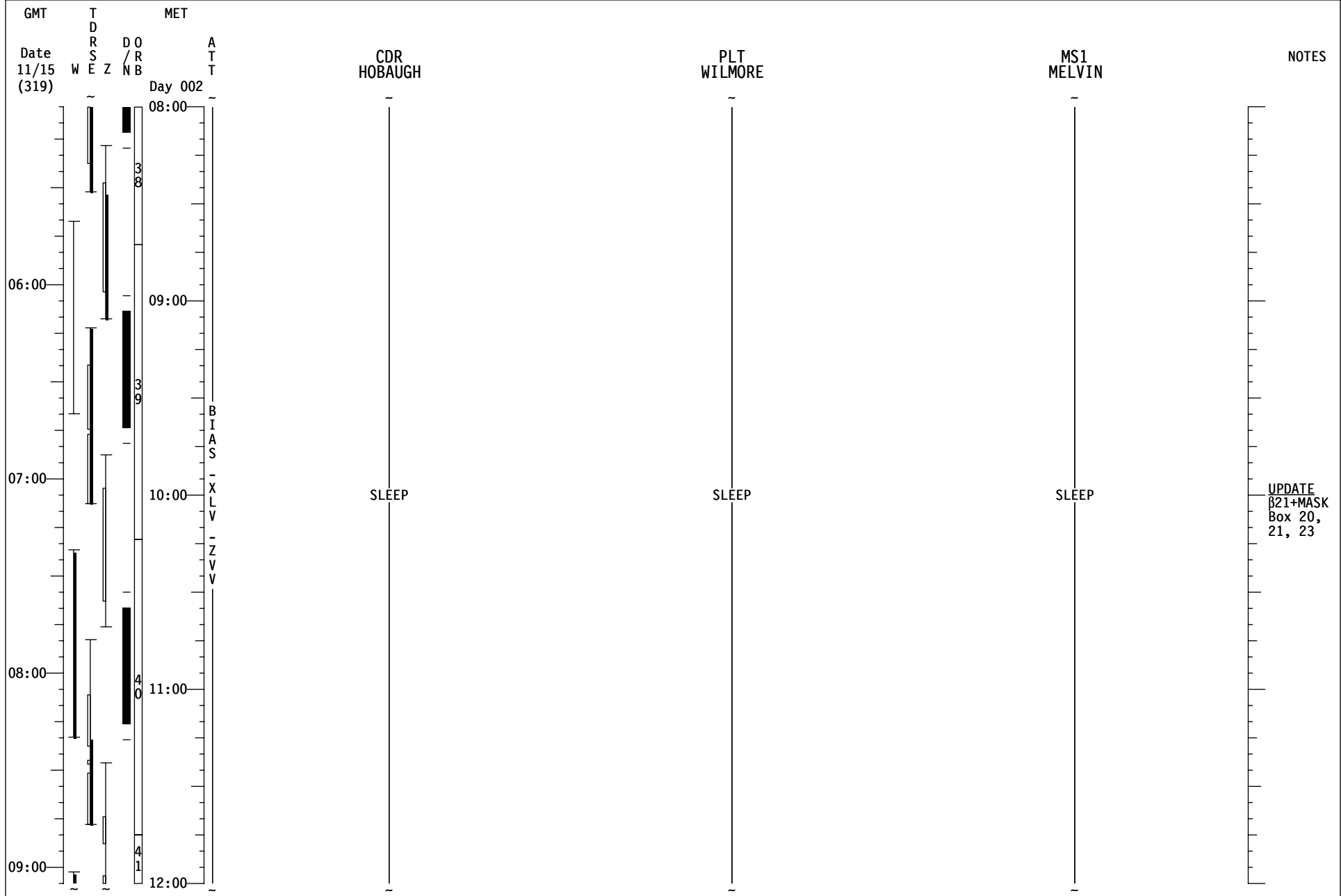
STS-129/ULF3 FD03



STS-129/ULF3 FD03

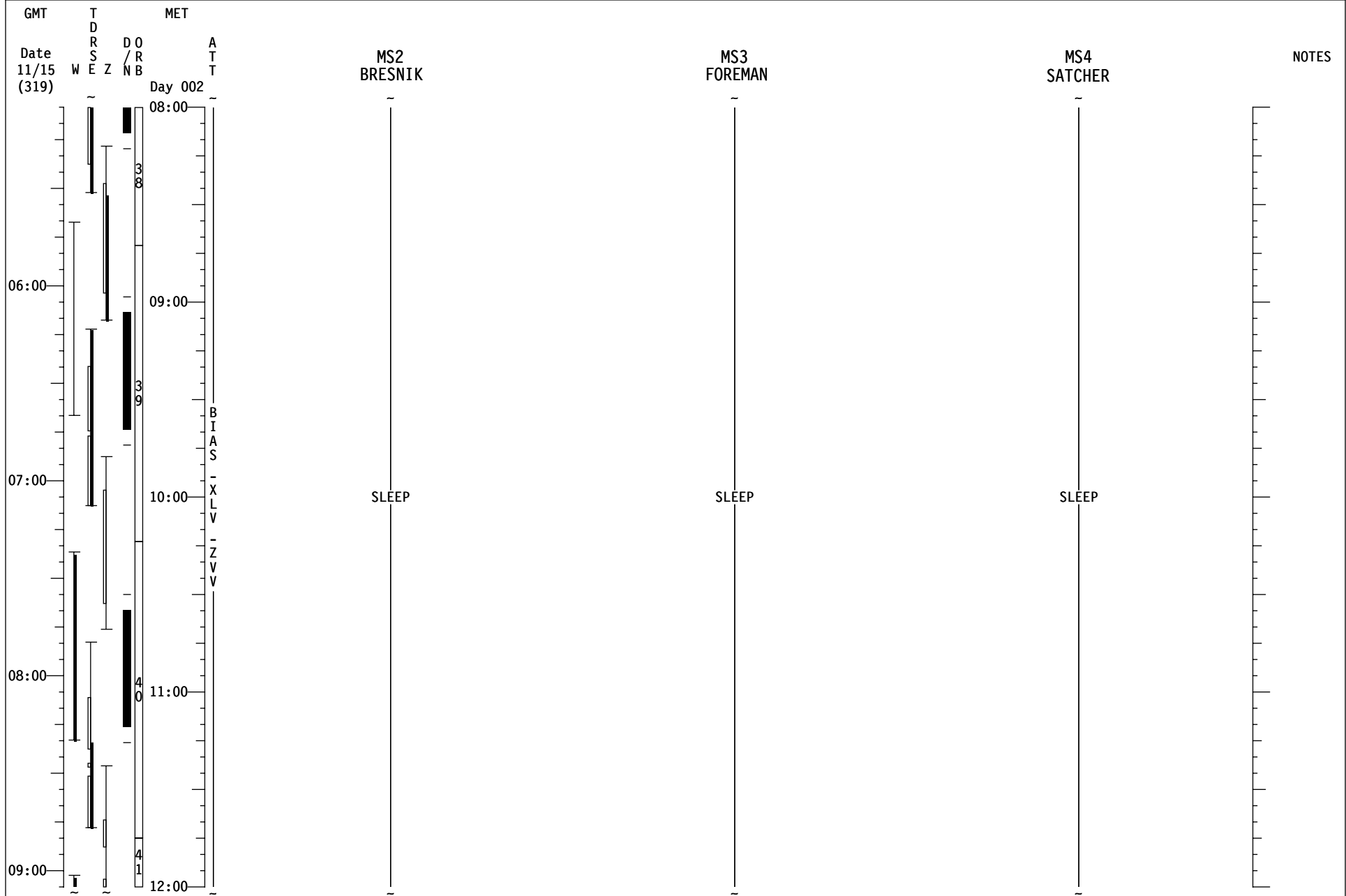


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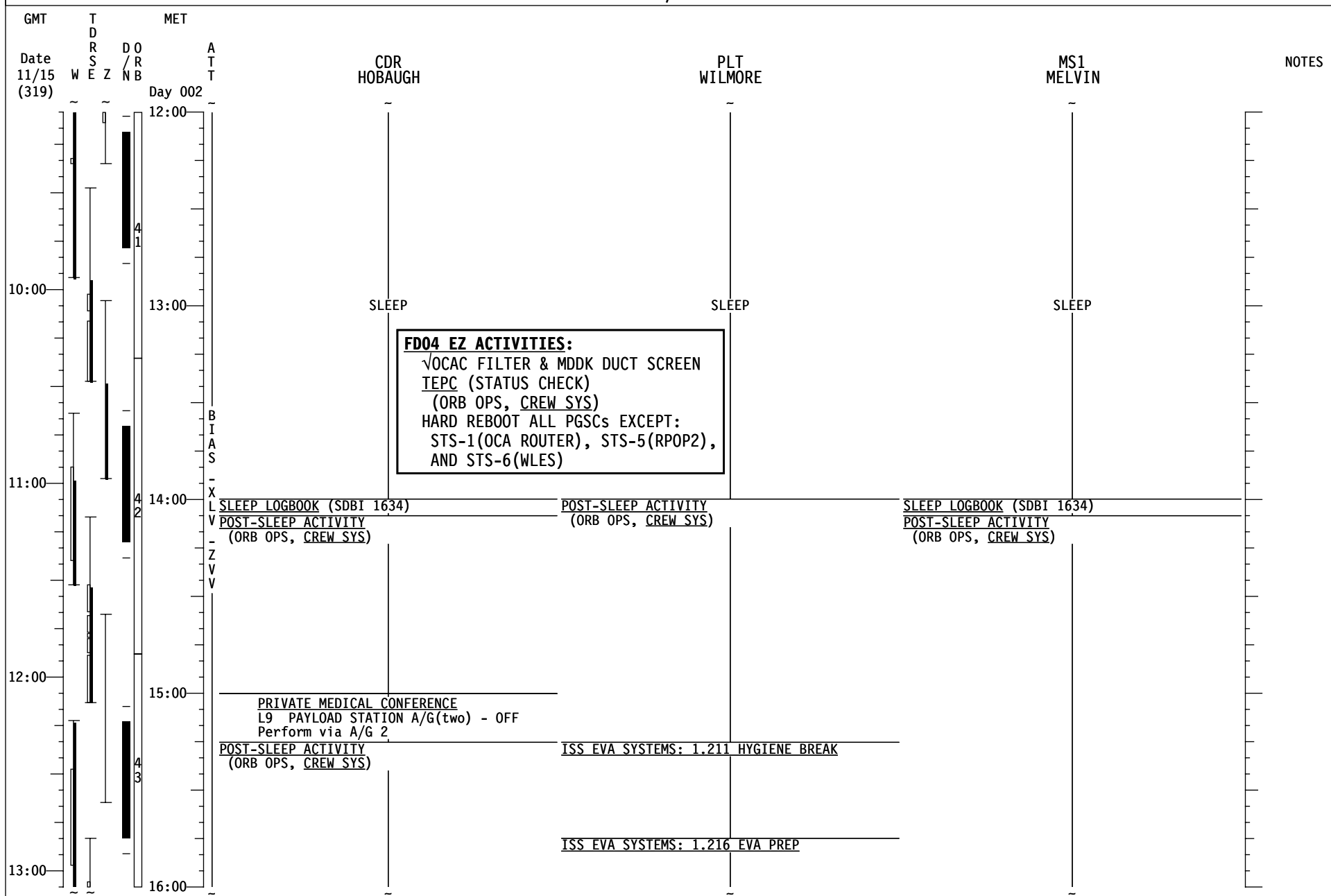


UPDATE
821+MASK
Box 20,
21, 23

STS-129/ULF3 FD03

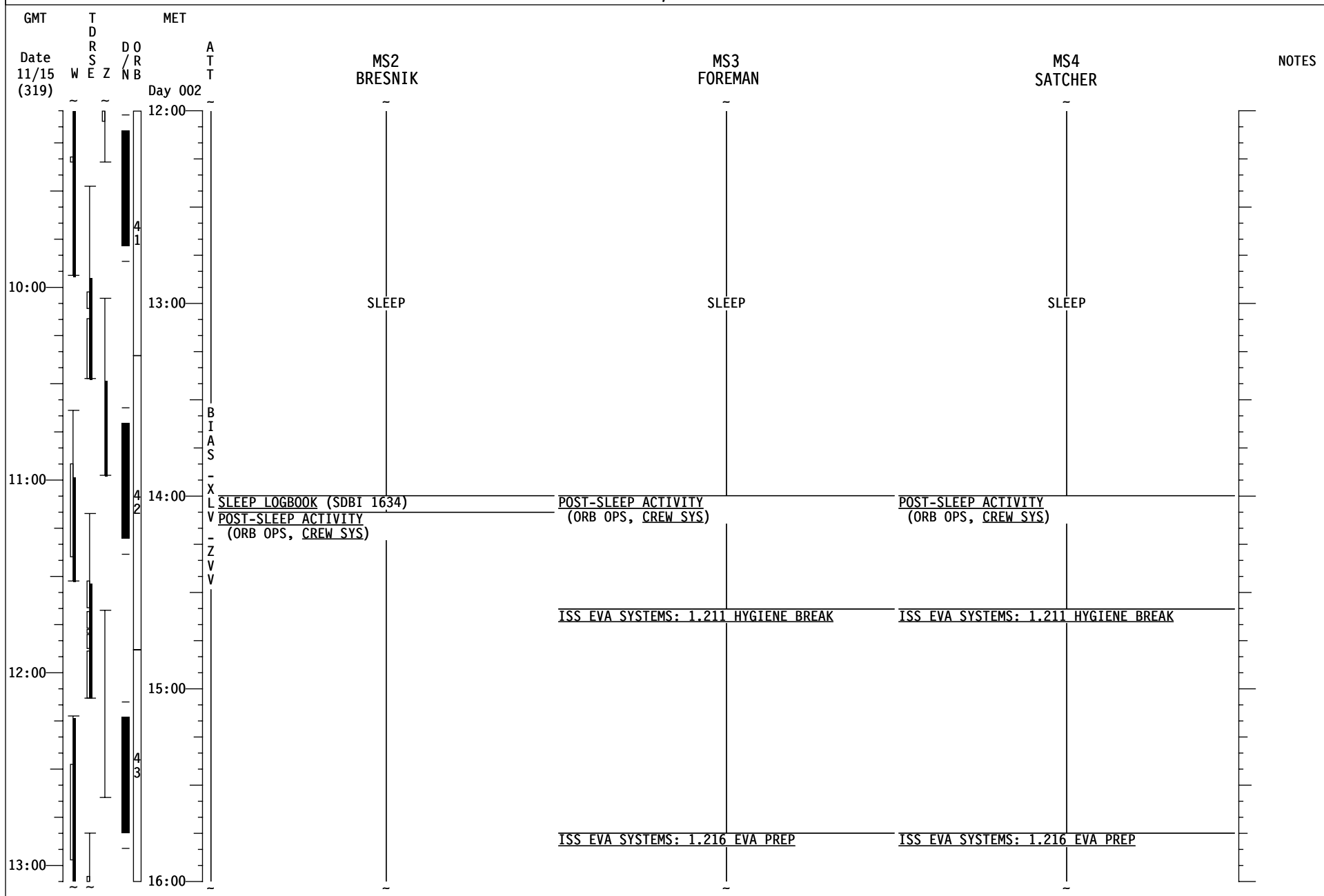


STS-129/ULF3 FD04



FD04 EZ ACTIVITIES:
 ✓OCAC FILTER & MDDK DUCT SCREEN
 TEPC (STATUS CHECK)
 (ORB OPS, CREW SYS)
 HARD REBOOT ALL PGSCs EXCEPT:
 STS-1(OCA ROUTER), STS-5(RPOP2),
 AND STS-6(WLES)

STS-129/ULF3 FD04



STS-129/ULF3 FD04

GMT	TDRS W E Z	MET Day 002	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ISS EVA SYSTEMS: 1.216 EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00				IMU STAR OF OPPTY ALIGN (ORB OPS, GNC) EVA 1 INHIBIT PAD (EVA, TIMELINES)	ISS EVA SYSTEMS: 1.220 EMU PURGE	CGBA and ABRS STATUS CK (Cue Card)CGBA, ABRS LI7 Check MCIU filter screen DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX	
15:00				EXERCISE	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	TRANSFER OPS Ref. Transfer List & MSG XXX	
18:00					ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	EXERCISE	
16:00				P/TV07 EVA (PHOTO/TV, SCENES) Setup			
19:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #2 Ref. MSG XXX	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC) ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS	ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS	
17:00				P/TV07 EVA (PHOTO/TV, SCENES) Ops			
20:00							NO UNISOLATED EXERCISE DURING SASA INSTALL

STS-129/ULF3 FD04

GMT	T D R S W E Z	MET	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
Date 11/15 (319)	W E Z	Day 002					
16:00				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ISS EVA SYSTEMS: 1.216 EVA PREP	ISS EVA SYSTEMS: 1.216 EVA PREP	
14:00				EXERCISE	ISS EVA SYSTEMS: 1.220 EMU PURGE	ISS EVA SYSTEMS: 1.220 EMU PURGE	
15:00					ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	
16:00				IVA SUPPORT PREP	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	
17:00				EVA IVA SUPPORT	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	
18:00					EGRESS/SETUP	EGRESS/SETUP	
19:00					SPARE SASA INSTALL (PLB to Z1) EXERCISE CONSTRAINT	SPARE SASA INSTALL (PLB to Z1) EXERCISE CONSTRAINT	
20:00							NO UNISOLATED EXERCISE DURING SASA INSTALL

STS-129/ULF3 FD04

GMT	TDRS W E Z	MET Day 002	A T T CDR HOBAUGH	P L T WILMORE	M S 1 MELVIN	NOTES
18:00			<p>P/TV07 EVA (PHOTO/TV, SCENES) Ops SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION</p>	<p>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</p>	<p>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</p>	<p>NO UNISOLATED EXERCISE DURING SASA INSTALL (NO ERGOMETER, HC-1, OR VELO)</p>
19:00			<p>MEAL</p>			
20:00			<p>P/TV07 EVA (PHOTO/TV, SCENES) Ops</p>			
21:00			<p>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #3 Ref. MSG XXX</p>			
22:00			<p>P/TV07 EVA (PHOTO/TV, SCENES) Ops</p>			
23:00			<p>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION</p>			
00:00						

STS-129/ULF3 FD04

GMT	T D R S W E Z	M E T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
Date 11/15 (319)	W E Z	Day 002				
18:00		20:00				
		21:00		SPARE SASA INSTALL (PLB to Z1) EXERCISE CONSTRAINT	SPARE SASA INSTALL (PLB to Z1) EXERCISE CONSTRAINT	NO UNISOLATED EXERCISE DURING SASA INSTALL (NO ERGOMETER, HC-1, OR VELO)
19:00		22:00	EVA IVA SUPPORT			
		23:00		ROUTE SGANT CABLE (TSA to Z1)	POA LUBE	
20:00				INSTALL NODE 1 HR/NH3 BRACKET		
		00:00		NODE1 FGB LAN CABLE/MMOD SHIELD	LUBE JEM RMS	
21:00						

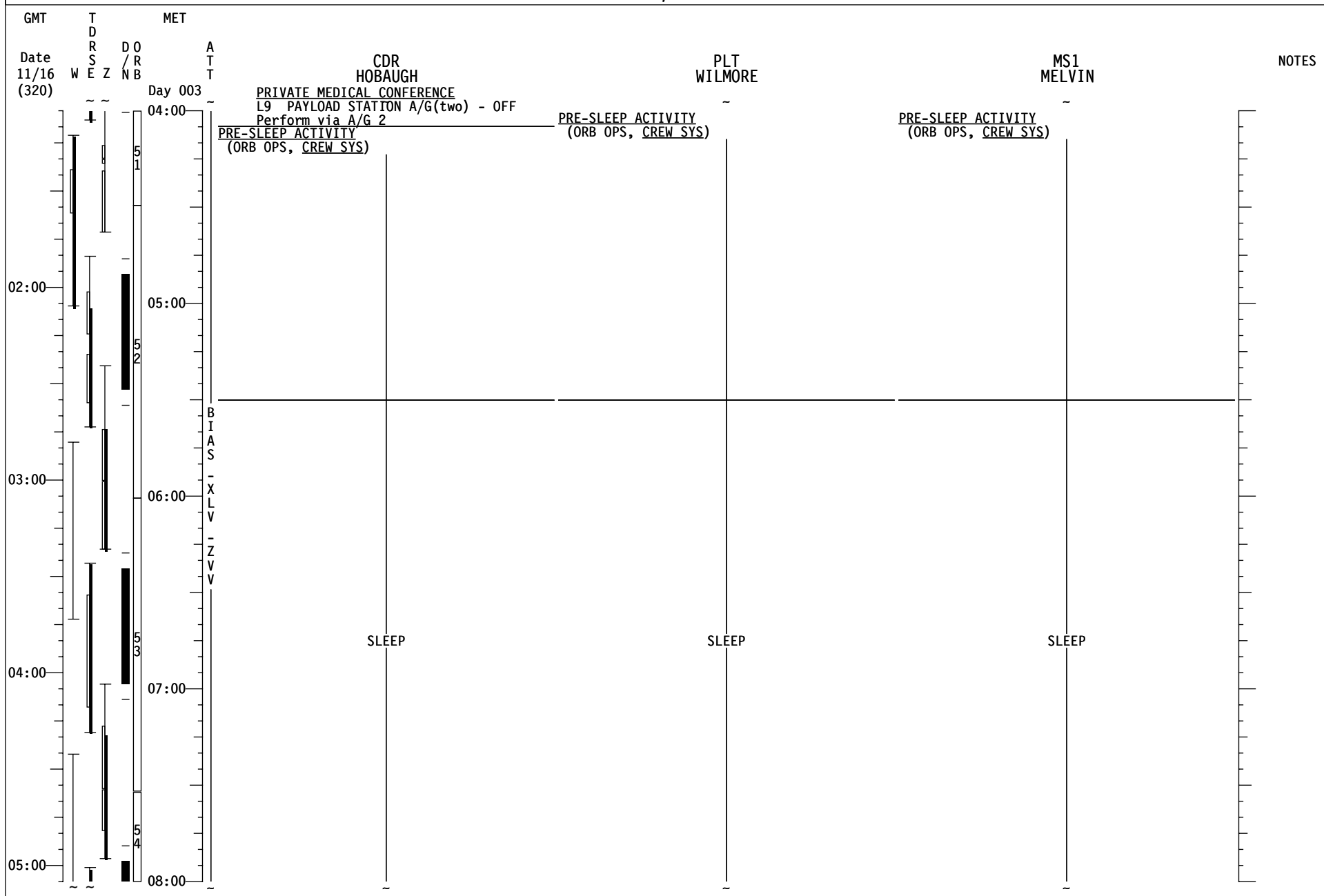
STS-129/ULF3 FD04

GMT	TDRS W E Z	MET Day 003	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/15 (319)							
00:00				<u>CWC TRANSFER</u> Transfer 2 CWCs to ISS	<u>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</u>	<u>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</u>	
22:00				<u>ROBOTICS: 2.110 WALKOFF TO NODE 2 PDGF (WS4)</u>		<u>ROBOTICS: 2.110 WALKOFF TO NODE 2 PDGF (WS4)</u>	UPDATE B21+MASK Box 20, 21, 24
01:00				<u>SHUTTLE CONDENSATE COLLECTION</u> (ORB OPS, ECLS) Perform <u>CHANGEOUT</u> Use CWC S/N XXX	<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
23:00				<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O Ref: <u>STS-129 CONSUMABLES TRACKING CC (EVA)</u>		
02:00						<u>NLP TERMINATION (ASSY OPS, PAYLOADS)</u> Terminate GAPS A-F (Vaccine 6) Steps 2, 6, 11	UPDATE B21+MASK Box 20,21
						<u>NLP TERMINATION (ASSY OPS, PAYLOADS)</u> Terminate GAPS 1-8 (Cells 2)	
00:00				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC		<u>CGBA and ABRS STATUS CK (Cue Card)</u> CGBA, ABRS	
					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>TRANSFER TAGUP</u> Coordinate with transfer counterparts	
03:00						<u>TRANSFER BRIEF</u> Call down status to MCC	
						<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
01:00				<u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2			
04:00							

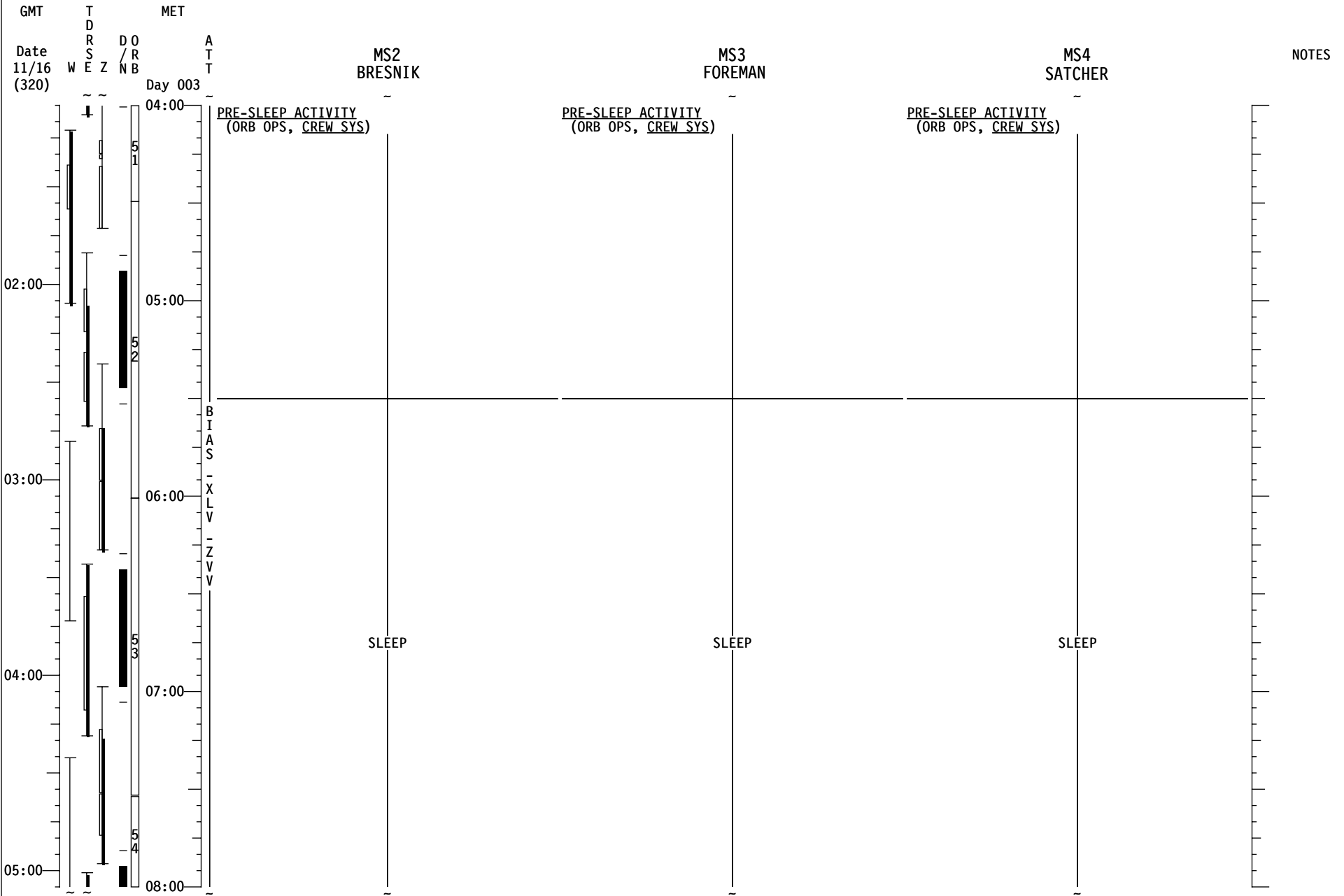
STS-129/ULF3 FD04

GMT	TDRS W E Z	MET D O R / R N B Day 003	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
00:00					NODE1 FGB LAN CABLE/MMOD SHIELD	LUBE JEM RMS	
22:00				EVA IVA SUPPORT	SO 1/4 AVIONICS CABLE TROUBLESHOOT	EVA CLEANUP & INGRESS	
					EVA CLEANUP & INGRESS		
				<u>LiOH SWAP</u> Ref. MSG. XXX	<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>	<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>	
23:00					<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O Ref: <u>STS-129 CONSUMABLES</u> <u>TRACKING CC (EVA)</u>	<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O Ref: <u>STS-129 CONSUMABLES</u> <u>TRACKING CC (EVA)</u>	
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
00:00				<u>ISS EVA SYSTEMS: 1.605 BSA BATTERY RECHARGE</u> (INIT) Ref: <u>SIS-129 BATTERY RECHARGE CC</u>	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST EVA CONFERENCE</u> Media Format: Crew Preference Discuss EVA and Future Impacts		
					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
01:00							
04:00							

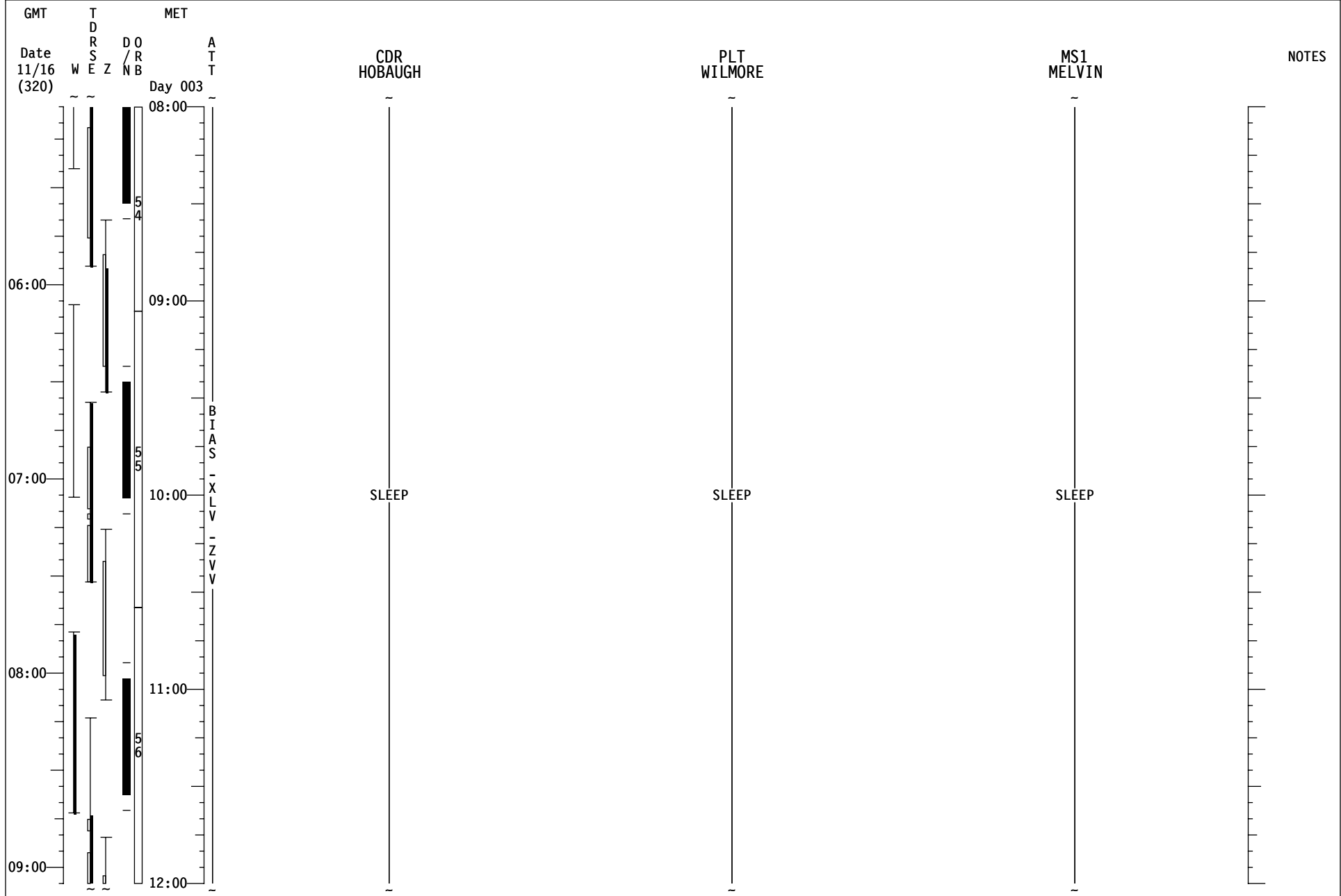
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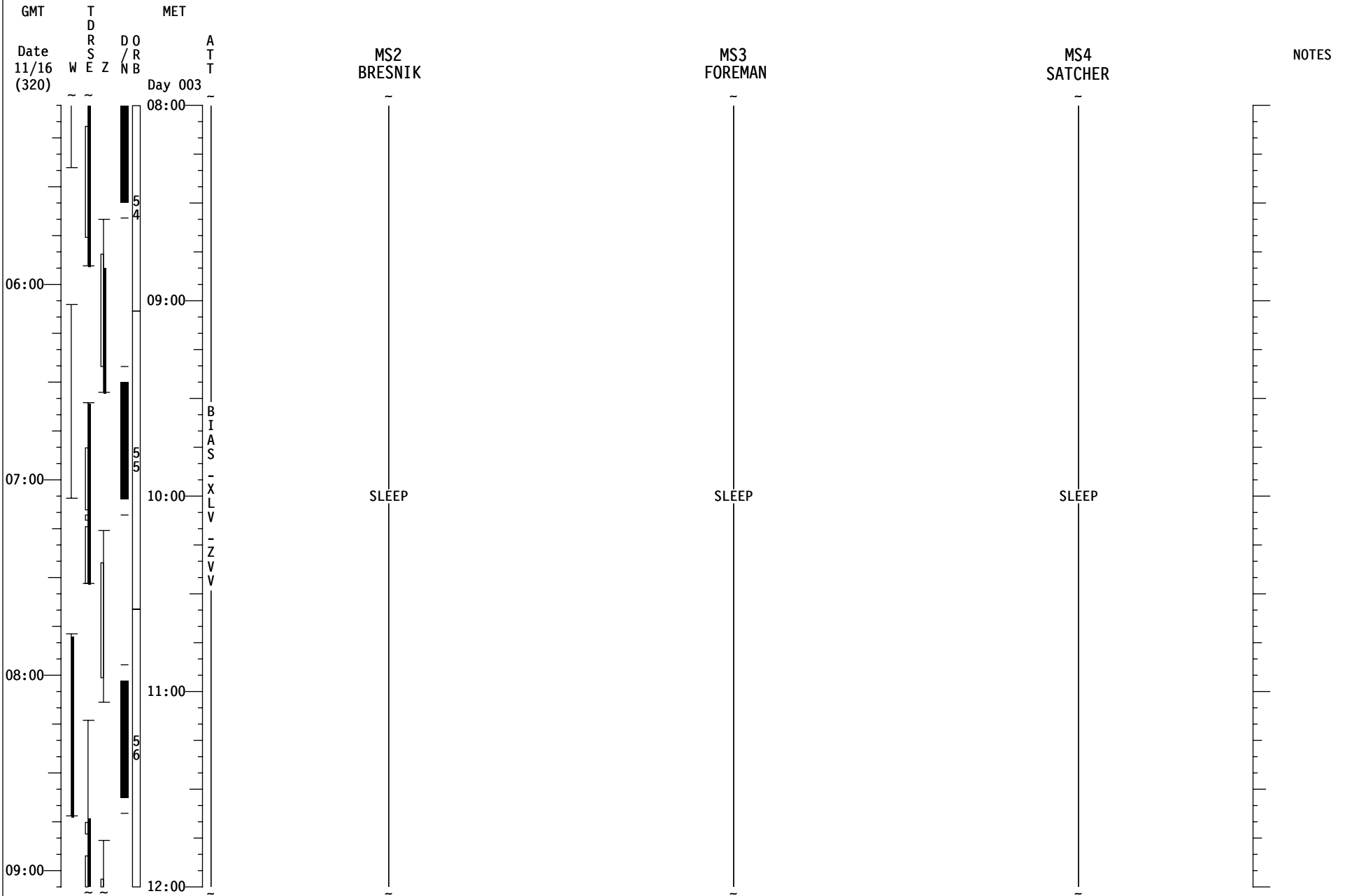
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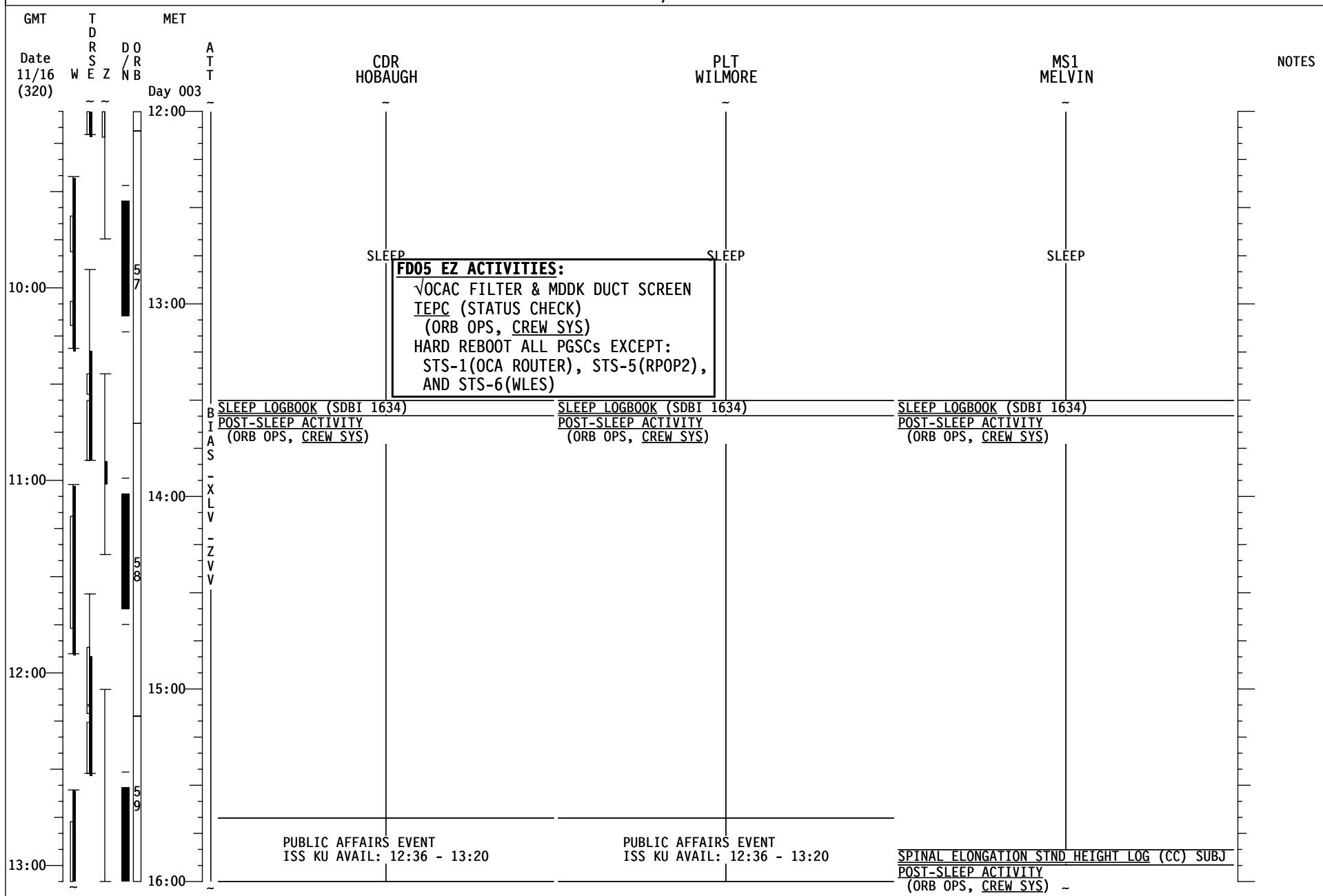
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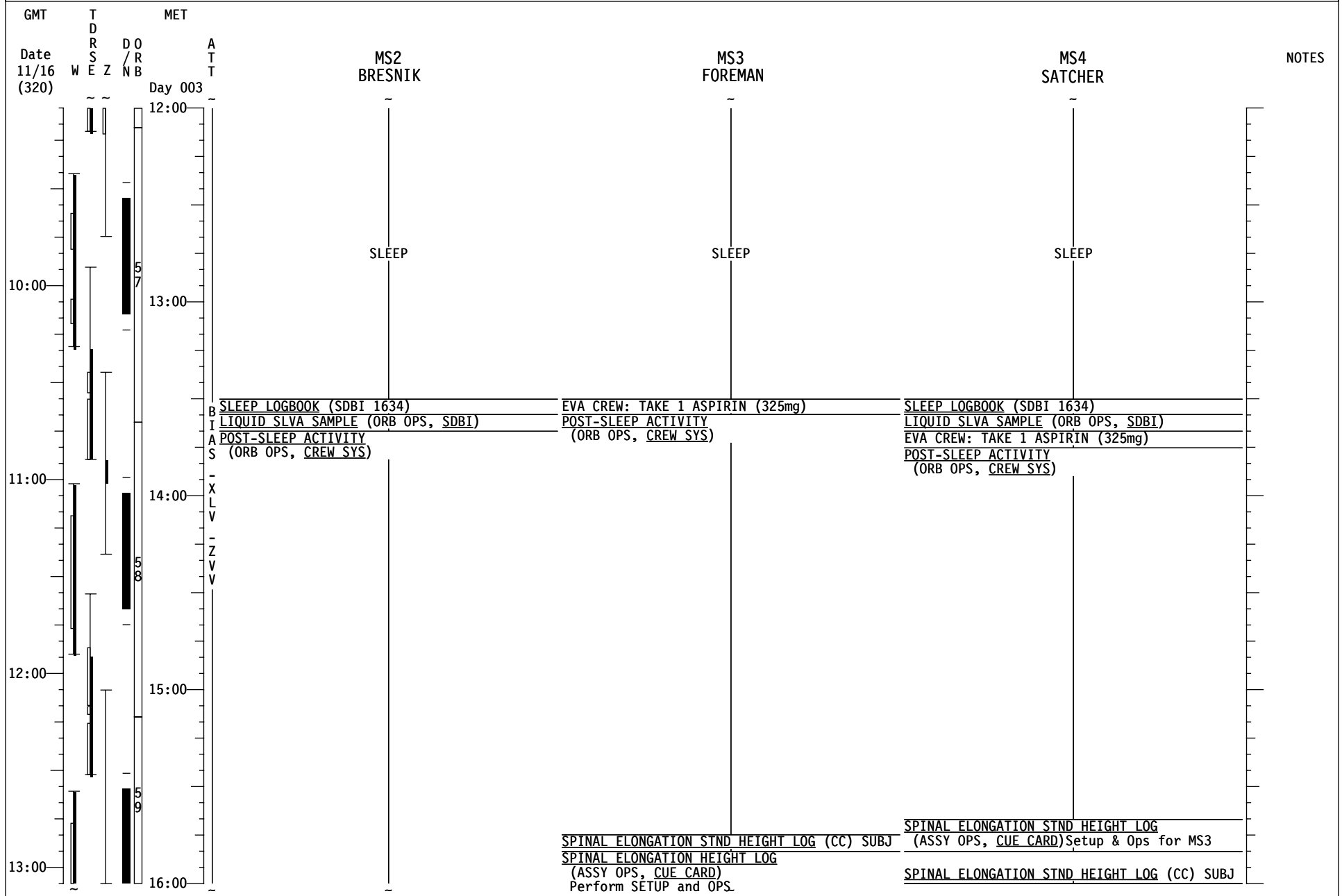
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STS-129/ULF3 FD05



STS-129/ULF3 FD05



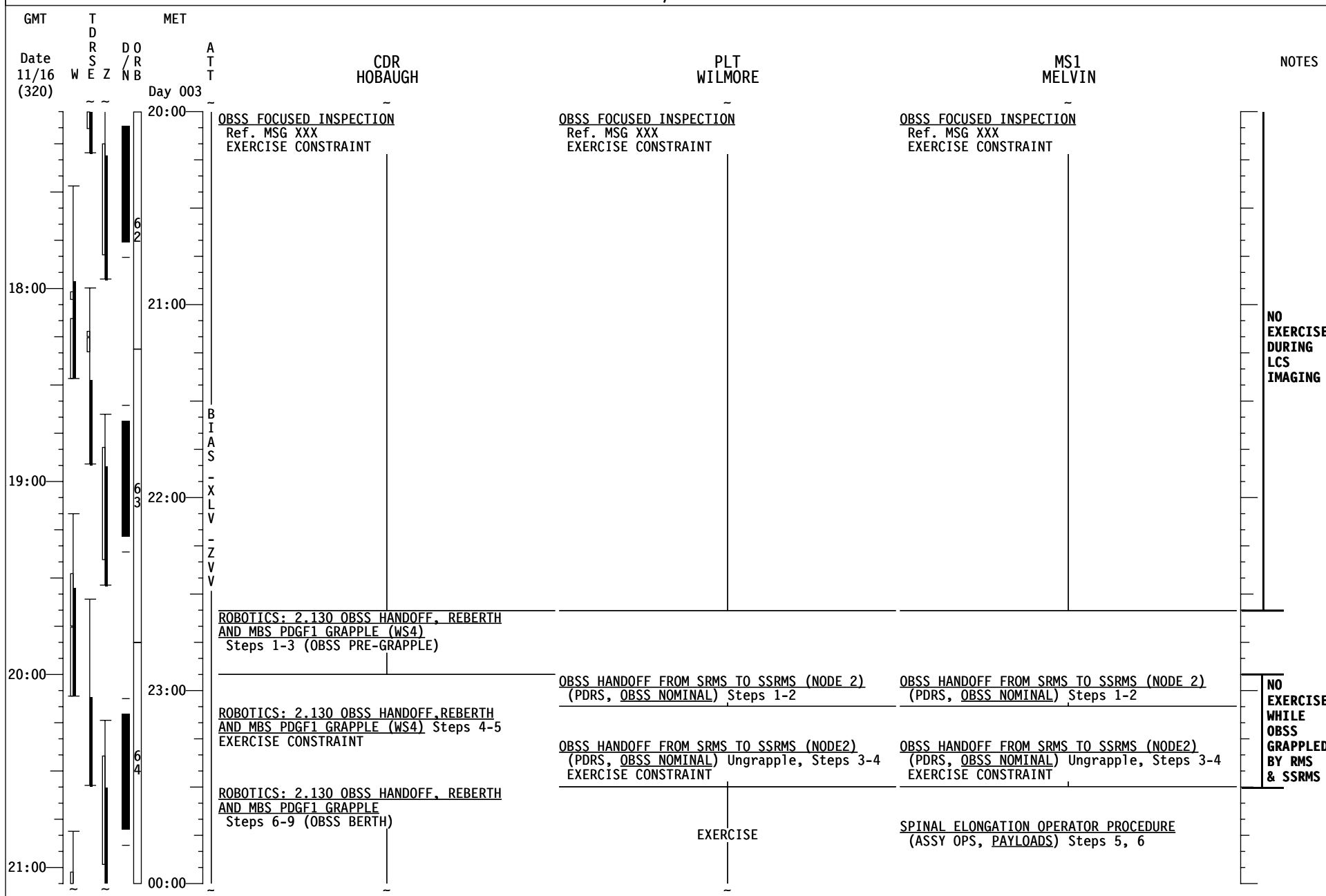
STS-129/ULF3 FD05

GMT	TDRS W E Z	MET DO R / N B	A T T Day 003	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00				SPINAL ELONGATION HEIGHT LOG (ASSY OPS, CUE CARD) SUBJ POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) SPINAL ELONGATION STND HEIGHT LOG (CC) SUBJ POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
				FOCUSSED INSPECTION DOUG REVIEW Ref. MSG XXX	FOCUSSED INSPECTION DOUG REVIEW Ref. MSG XXX	CGBA and ABRS STATUS CK (Cue Card) CGBA, ABRS FOCUSSED INSPECTION DOUG REVIEW Ref. MSG XXX	
14:00				N2 REPRESS USING PAYLOAD N2 VLVS [A]	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Pre-Grapple MNVR, Steps 1-2	L17 Check MCIU filter screen OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Pre-Grapple MNVR, Steps 1-2	
				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 1-4 (OBSS GRAPPLE)	[A] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS SETUP AND INIT Steps 1-7 MCC will TMBU S/W FDA	ABRS ASCENT FILTER CHANGEOUT (ASSY OPS, PAYLOADS)	
				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 5-7 (MNVR TO HANDOFF)	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) MRL Release, Steps 3-5	ABRS TRANSFER MDDK TO ISS (ASSY OPS, PAYLOADS)	
15:00					SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #4 Ref. MSG XXX	[B] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS TERM AND RECONFIG Steps 8-14 MCC will TMBU S/W FDA	
				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Step 8 (OBSS UNGRAPPLE) EXERCISE CONSTRAINT	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Grapple, Steps 6-7 EXERCISE CONSTRAINT	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Grapple, Steps 6-7 EXERCISE CONSTRAINT	NO EXERCISE WHILE OBSS GRAPPLED BY RMS & SSRMS
16:00				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 9-11 (MNVR to FI View)	OBSS MANEUVER TO OBSS CLEARANCE POSN (PDRS, OBSS NOMINAL)	OBSS MANEUVER TO OBSS CLEARANCE POSN (PDRS, OBSS NOMINAL)	
				OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	N2 REPRESS USING PAYLOAD N2 VLVS [B] SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION	OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	NO EXERCISE DURING LCS IMAGING
17:00					OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	

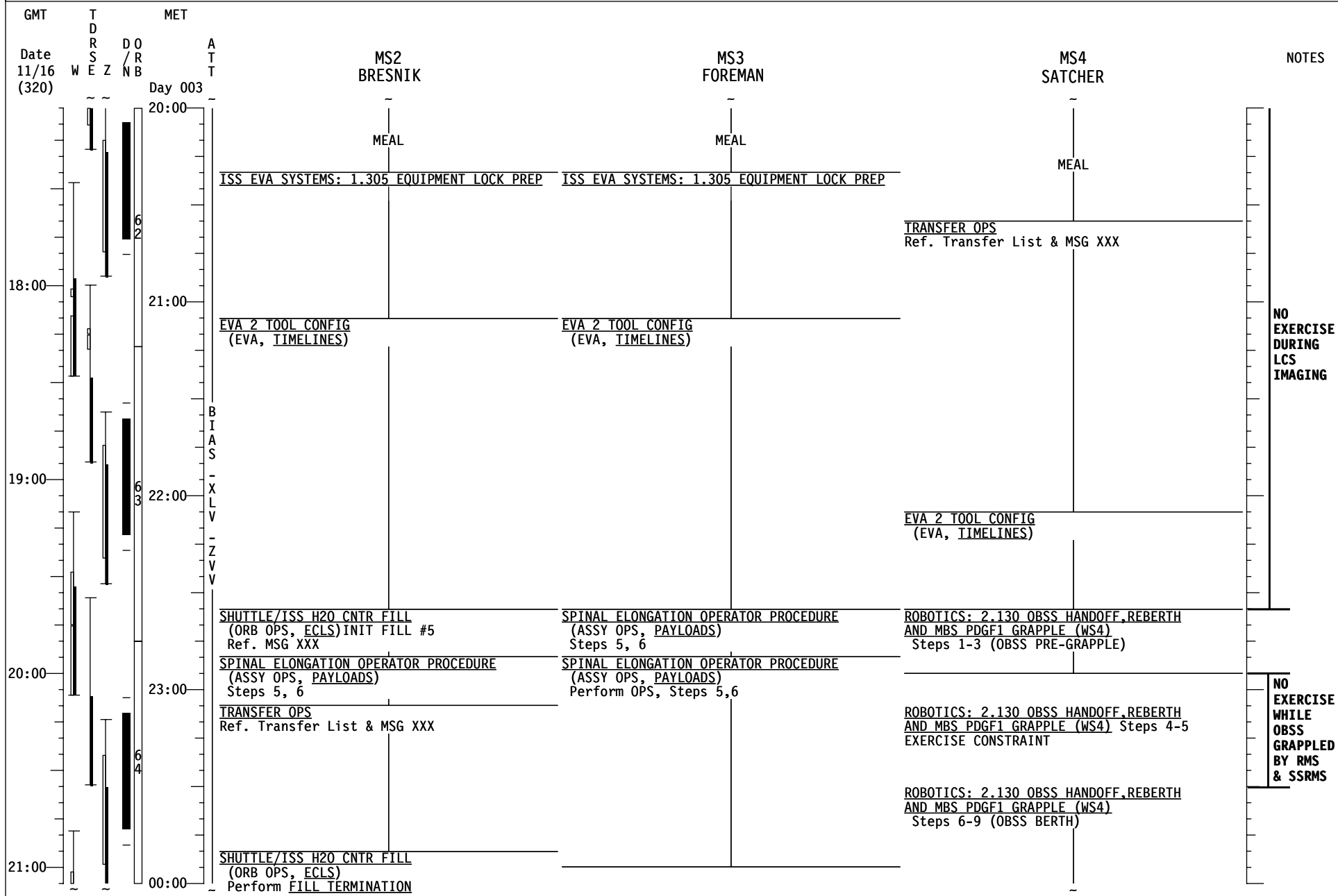
STS-129/ULF3 FD05

GMT	TDRSZ	MET	ATT	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
Date 11/16 (320)	W E Z	DO/R/NB	Day 003				
16:00				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) SPINAL ELONGATION STND HEIGHT LOG (CC) SUBJ POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SPINAL ELONGATION HEIGHT LOG (ASSY OPS, CUE CARD) Perform SETUP and OPS POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00				EXERCISE	DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX SPINAL ELONGATION OPERATOR PROCEDURE (ASSY OPS, PAYLOADS) Perform Setup, Steps 1-4	ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 1-4 (OBSS GRAPPLE)	
15:00				ISS EVA SYSTEMS: 1.605 BSA BATTERY RECHARGE (TERM) Ref: STS-129 BATTERY RECHARGE CC X ISS EVA SYSTEMS: 1.605 BSA BATTERY RECHARGE L (INIT) Ref: STS-129 BATTERY RECHARGE CC		ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF StepS 5-7 (MNVR TO HANDOFF)	
16:00				Z EMU SWAP FOR EVA 2 (EVA, AIRLOCK CONFIG)	EMU SWAP FOR EVA 2 (EVA, AIRLOCK CONFIG)		
17:00						ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Step 8 (OBSS UNGRAPPLE) EXERCISE CONSTRAINT	NO EXERCISE WHILE OBSS GRAPPLED BY RMS & SSRMS
18:00				ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-129 CONSUMABLES TRACKING CC (EVA)	ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-129 CONSUMABLES TRACKING CC (EVA)	ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 9-11 (MNVR to FI View)	
19:00				MEAL	MEAL	MEAL	
20:00							NO EXERCISE DURING LCS IMAGING

STS-129/ULF3 FD05



STS-129/ULF3 FD05



STS-129/ULF3 FD05

GMT	TDRS W E Z	MET Day 004	A T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/16 (320)	4	00:00		<u>ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE</u> Steps 6-9 (OBSS BERTH)	EXERCISE	<u>OBSS HANDOFF FROM SRMS TO SSRMS (NODE2)</u> (PDRS, OBSS HANDOFF) (MRL LATCH) Step 5-8	
				<u>ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE (WS4)</u> Steps 10-14 (PDGF1 GRAPPLE)		<u>ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE (WS4)</u> Steps 10-14 (PDGF1 GRAPPLE)	
22:00		01:00			<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 2 BRIEFING CARD</u> (EVA, TIMELINES)		
				<u>ELC 2 GRAPPLE</u> (PDRS, <u>ELC NOMINAL OPS</u>)		<u>ELC 2 GRAPPLE</u> (PDRS, <u>ELC NOMINAL OPS</u>)	
				<u>SPINAL ELONGATION OPERATOR PROCEDURE</u> (ASSY OPS, <u>PAYLOADS</u>) Steps 5, 6		<u>CGBA and ABRSTATUS CK</u> (Cue Card) CGBA only	
23:00		02:00		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>) Perform Air Quality Report to MCC	<u>SPINAL ELONGATION OPERATOR PROCEDURE</u> (ASSY OPS, <u>PAYLOADS</u>) Steps 5, 6	<u>TRANSFER TAGUP</u> Coordinate with transfer counterparts	
				PUBLIC AFFAIRS EVENT ISS KU AVAIL: 23:22 - 23:58	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 23:22 - 23:58	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 23:22 - 23:58	
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>TRANSFER BRIEF</u> Call down status to MCC	
00:00		03:00				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	
				<u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2			
01:00		04:00		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)			

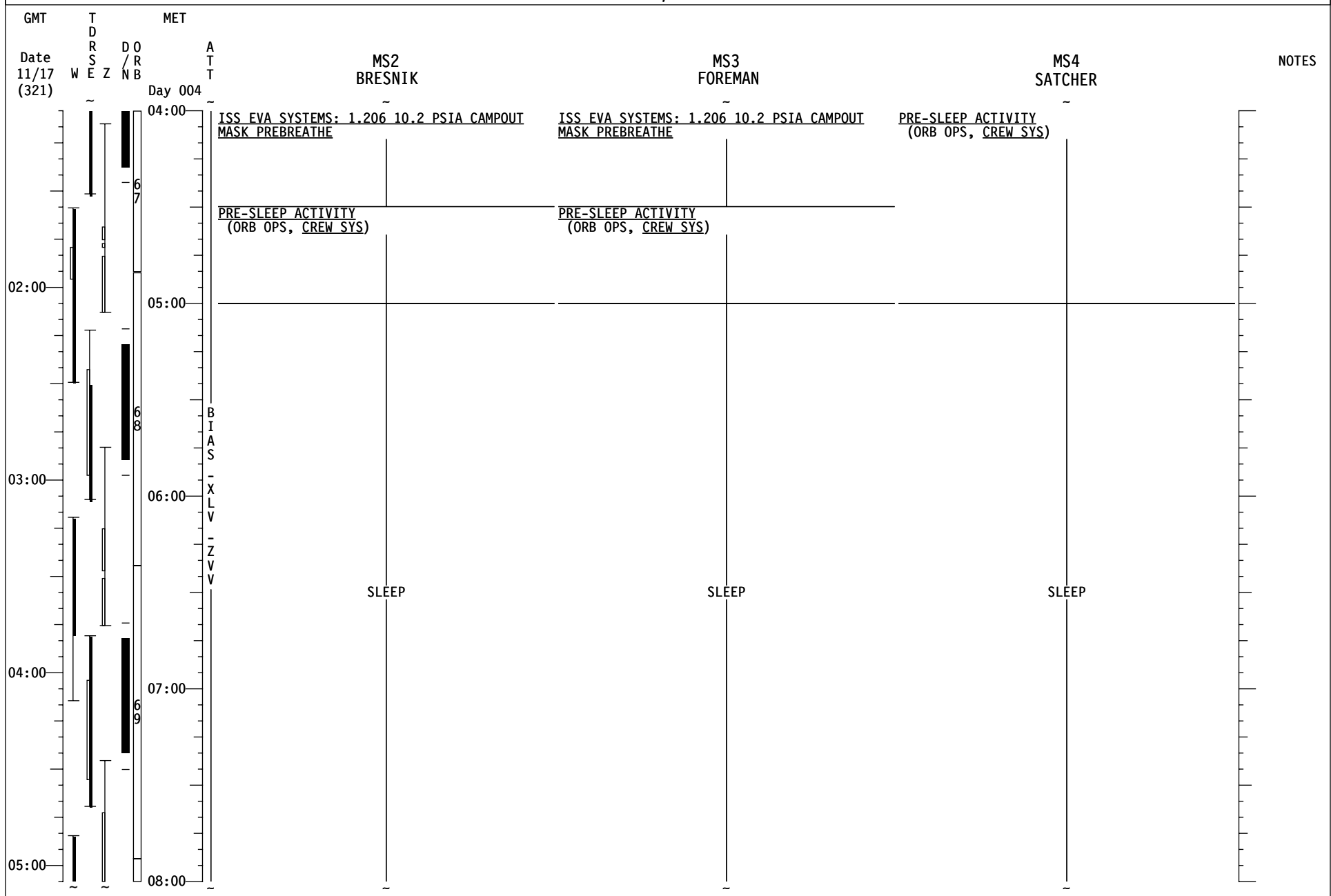
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GMT	T D R S E Z	MET	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
Date 11/16 (320)	W E Z	DO R NB	Day 004				
00:00	6 4			<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> Perform <u>FILL TERMINATION</u> <u>CWC TRANSFER</u> Transfer 2 CWCs to ISS		<u>ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE (WS4)</u> Steps 6-9 (OBSS BERTH)	
22:00	6 5			<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 2 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EXERCISE</u>	<u>SPINAL ELONGATION OPERATOR PROCEDURE (ASSY OPS, PAYLOADS)</u> Steps 5, 6	
23:00	6 6			<u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	<u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 2 BRIEFING CARD (EVA, TIMELINES)</u>	
00:00	6 7					<u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	
01:00				<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE</u>	<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE</u>	<u>PUBLIC AFFAIRS EVENT</u> ISS KU AVAIL: 23:22 - 23:58	
04:00						<u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	

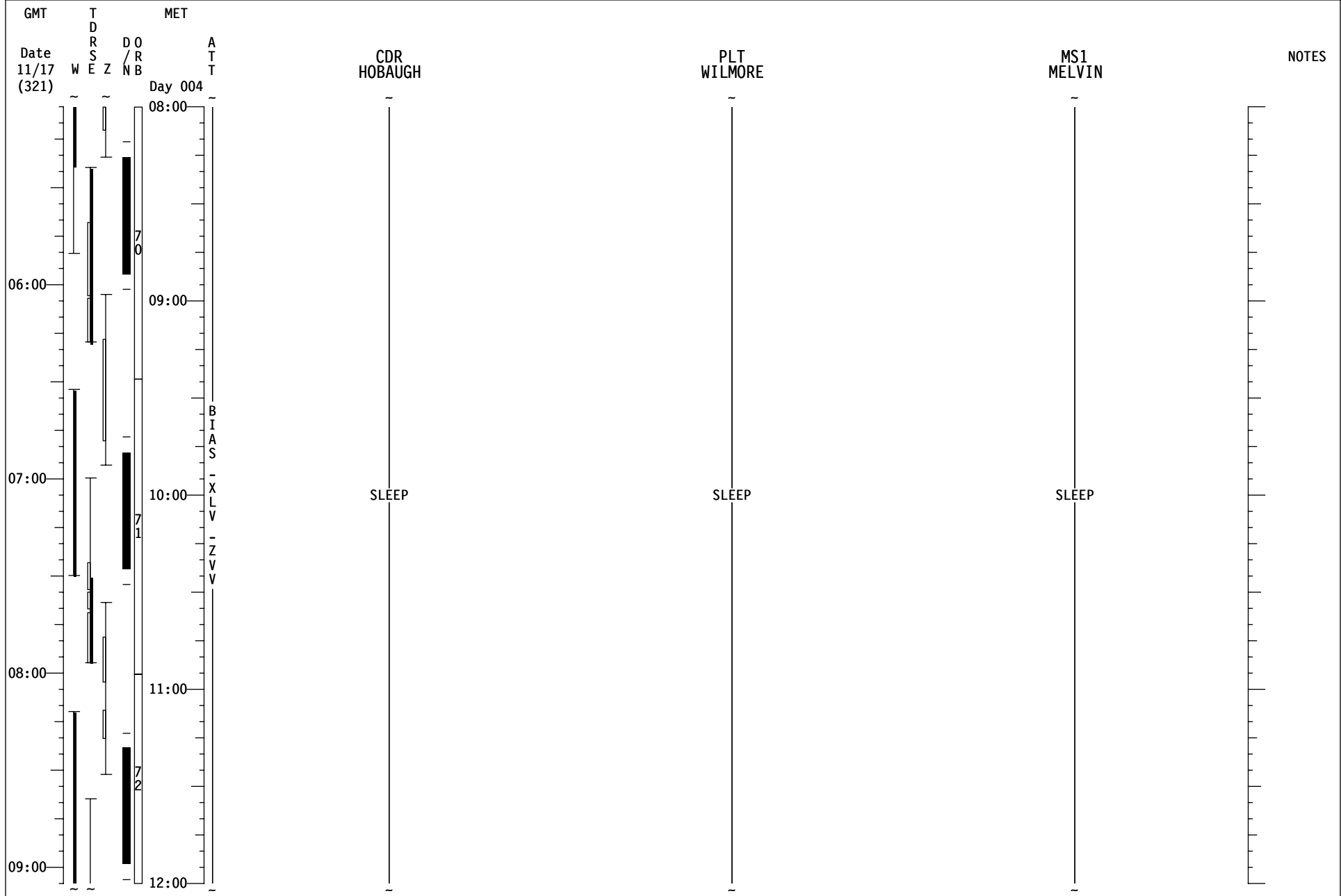
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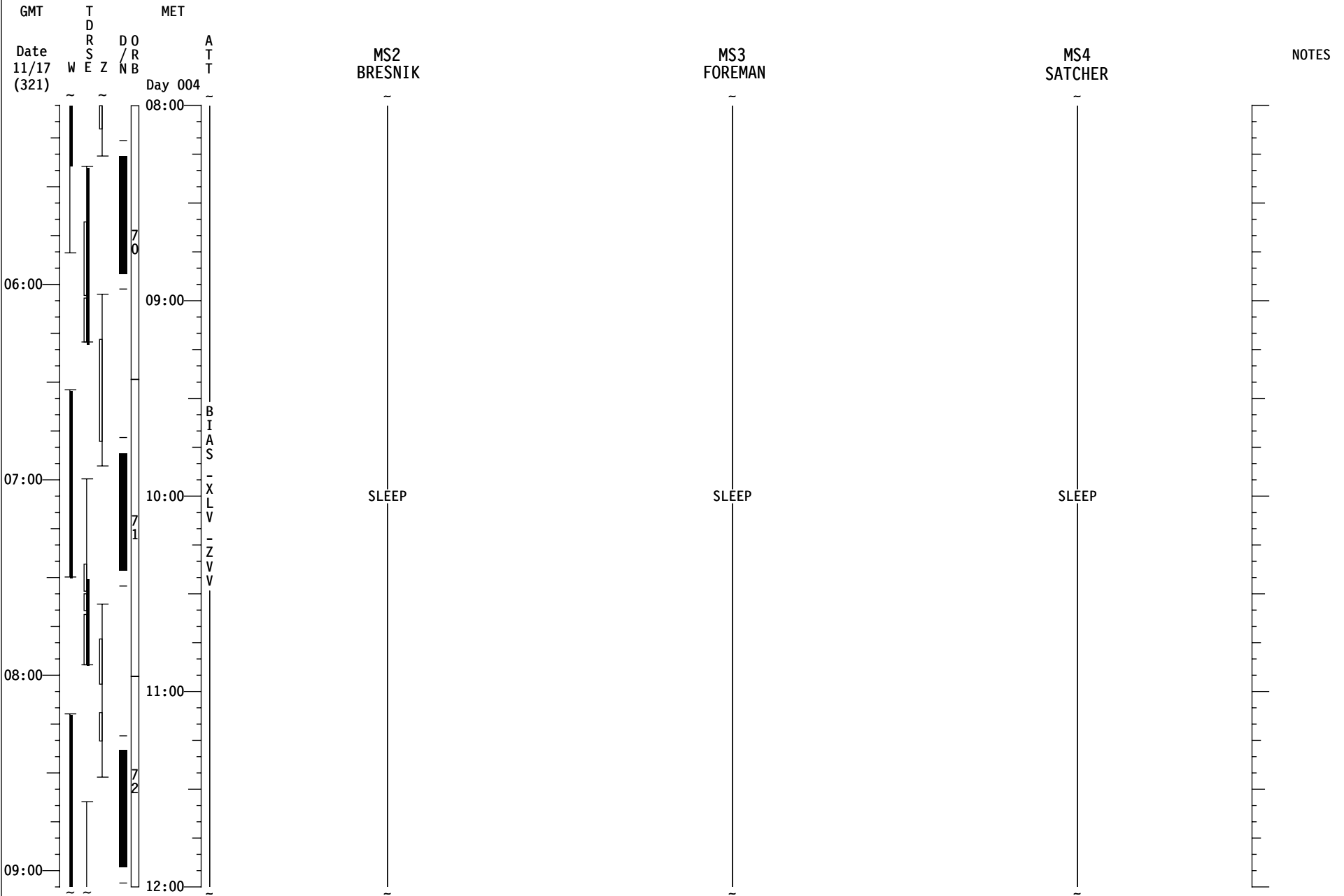
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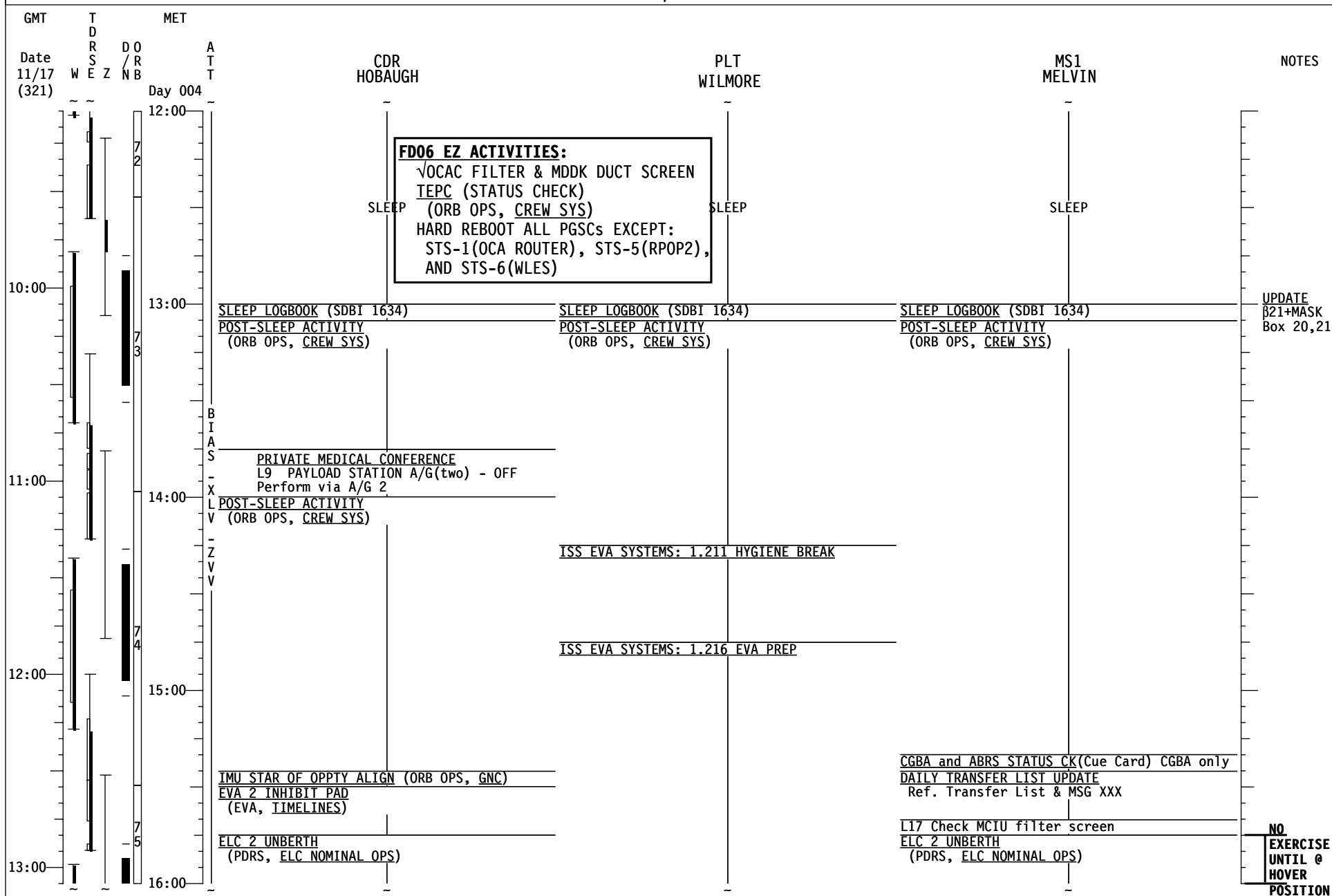
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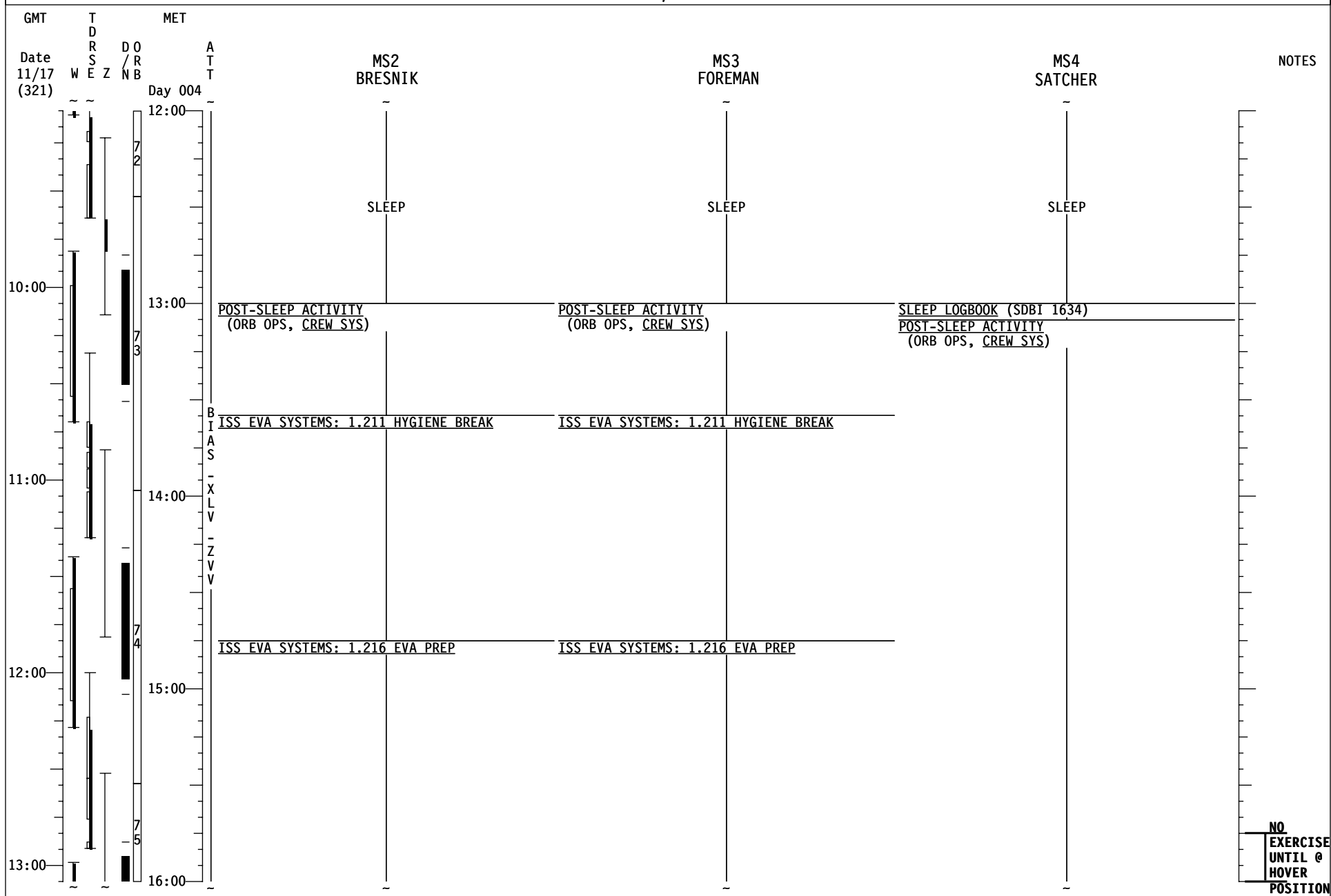
STS-129/ULF3 FD05



STS-129/ULF3 FD06



STS-129/ULF3 FD06



NO
EXERCISE
UNTIL @
HOVER
POSITION

STS-129/ULF3 FD06

GMT	T D R S E Z	MET	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/17 (321)	W E Z	DO / R NB Day 004				
16:00			ELC 2 UNBERTH (PDRS, ELC NOMINAL OPS)	ISS EVA SYSTEMS: 1.216 EVA PREP	ELC 2 UNBERTH (PDRS, ELC NOMINAL OPS)	
				ISS EVA SYSTEMS: 1.220 EMU PURGE		
				ISS EVA SYSTEMS: 1.225 EMU PREBREATHE		
14:00			ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Steps 1-3; EXERCISE CONSTRAINT		ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Steps 1-3; EXERCISE CONSTRAINT	NO EXERCISE WHILE ELC 2 GRAPPLED BY SRMS & SSRMS
					ROBOTICS: 1.310 ELC2 HANDOFF AND INSTALL Steps 3, 4	
			ELC2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Step 4 (MNVR ELC2 VIEWING POS)	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	ELC2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Step 4 (MNVR ELC2 VIEWING POS)	
			P/TV07 EVA (PHOTO/TV, SCENES) Setup		ROBOTICS: 1.310 ELC2 HANDOFF AND INSTALL Steps 5-7	
15:00			SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #6 Ref. MSG XXX	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC) TRANSFER OPS Ref. Transfer List & MSG XXX	EXERCISE CONSTRAINT	
			P/TV07 EVA (PHOTO/TV, SCENES) Ops			
			A √ A/FREE/VERN PERMANENT DAP EDIT: A11: CA=7 A12: CA=7 B12: CA=7 B13: CA=7			
16:00					S&M: 1.911 PAS NORMAL MATE Steps 6-17	NO EXERCISE WHILE AT ELC 2 INSTALL POSITION
					EXERCISE CONSTRAINT	
			SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
			After ELC2 Install [A] P/TV07 EVA (PHOTO/TV, SCENES) Ops	ROBOTICS: 1.320 ELC2 RELEASE. WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4	ROBOTICS: 1.320 ELC2 RELEASE. WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4	
17:00						
20:00						

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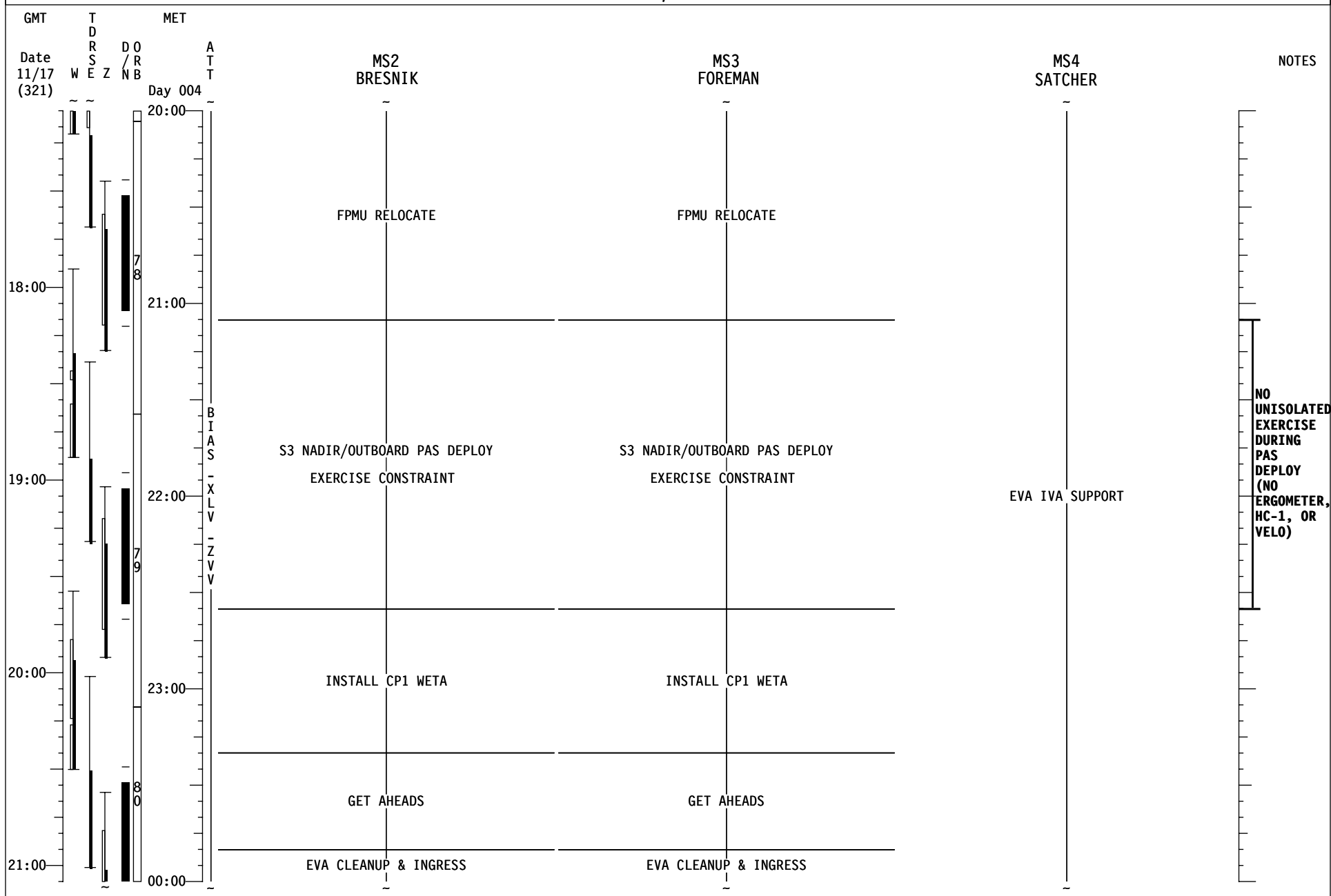
GMT	TDRS W E Z	MET Day 004	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
16:00				ISS EVA SYSTEMS: 1.216 EVA PREP	ISS EVA SYSTEMS: 1.216 EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	NO EXERCISE WHILE ELC 2 GRAPPLD BY SRMS & SSRMS
				ISS EVA SYSTEMS: 1.220 EMU PURGE	ISS EVA SYSTEMS: 1.220 EMU PURGE		
				ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE		
17:00				ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	IVA SUPPORT PREP	
18:00				ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)		
19:00				GATOR INSTALL	GATOR INSTALL	EVA IVA SUPPORT	NO EXERCISE WHILE AT ELC 2 INSTALL POSITION
20:00				FPMU RELOCATE	FPMU RELOCATE		

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GMT	TDRS W E Z	MET Day 004	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/17 (321)							
18:00							
				P/TV07 EVA (PHOTO/TV, SCENES) Ops	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4 TRANSFER OPS Ref. Transfer List & MSG XXX	
				MEAL	EXERCISE		
19:00							
				FILTER CLEANING (IFM, SCHEDULED MAINTENANCE) Inspect filters and clean as necessary.			
					MEAL		
20:00							
				L SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #7 Ref. MSG XXX	TRANSFER OPS Ref. Transfer List & MSG XXX		
				Z P/TV07 EVA (PHOTO/TV, SCENES) Ops			
21:00							
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
				CWC TRANSFER Transfer 2 CWCs to ISS	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 5-8	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 5-8	
						EXERCISE	
23:00							
00:00							

NO UNISOLATED EXERCISE DURING PAS DEPLOY (NO ERGOMETER, HC-1, OR VELO)

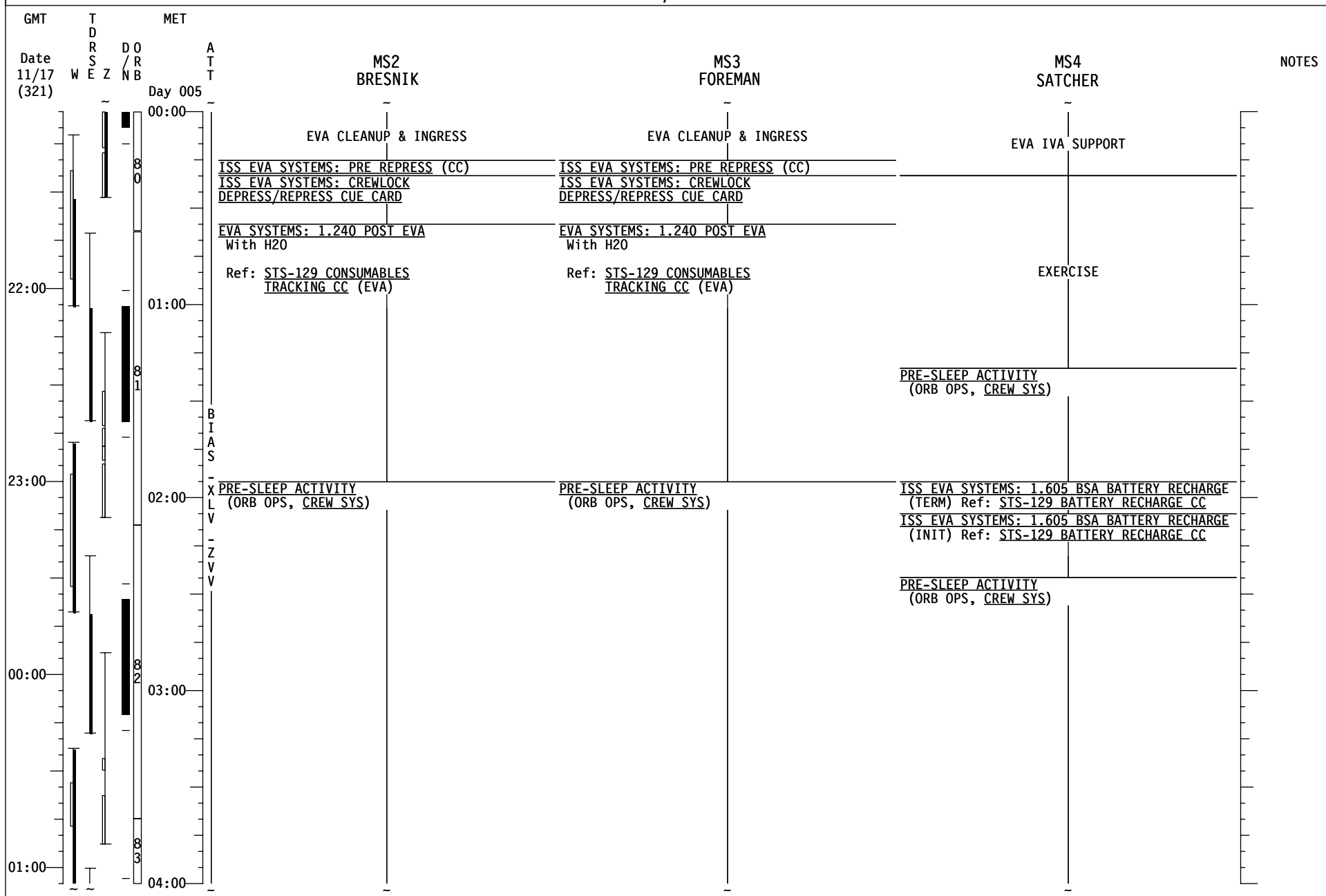
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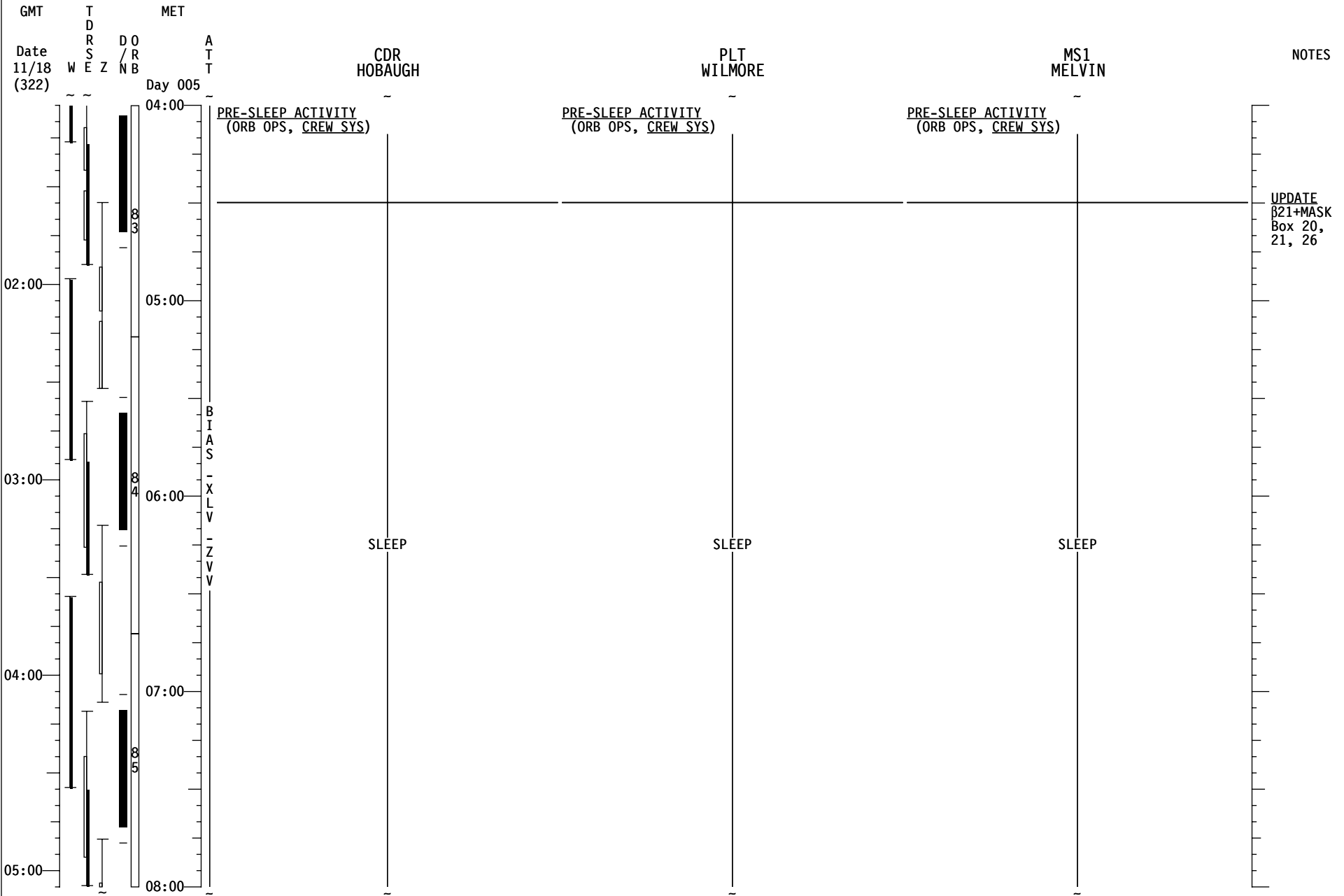
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GMT	TDRS W E Z	MET Day 005	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
		00:00	<u>PRE GATHER DUMP EQUIPMENT</u> Ref. MSG XXX	<u>ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO</u> <u>MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG</u> Steps 5-8	<u>ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO</u> <u>MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG</u> Steps 5-8	
				<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>		
			<u>ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS)</u> Step 5 (PRECRADLE)		<u>ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS)</u> Step 5 (PRECRADLE)	
			<u>WCS FILTER CHECK</u> [B]	<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O	<u>PRLA CLOSE</u> (ORB OPS, PRLA)	
			<u>TV (ILL OPS) (P/TV, CC) ILL ON - A,D</u>			
			<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	Ref: <u>STS-129 CONSUMABLES</u> <u>TRACKING CC (EVA)</u>		
22:00		01:00	[B] <u>WCS CRADLE - AUTO INHIBIT</u> Inspect hose block filter, change if req'd <u>WCS CRADLE - AUTO</u>		<u>CGBA and ABRSTATUS CK (Cue Card) CGBA only</u> <u>TRANSFER TAGUP</u> Coordinate with transfer counterparts	
					<u>TRANSFER BRIEF</u> Call down status to MCC	
					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
23:00		02:00	<u>EXERCISE</u> ARED is available	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
			<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
00:00		03:00	<u>NETMEETING VIDEO CONFERENCING</u> (ORB OPS, PGSC) Private Medical Conference KU TDRW: 3:29 - 3:42			
			<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
01:00		04:00				

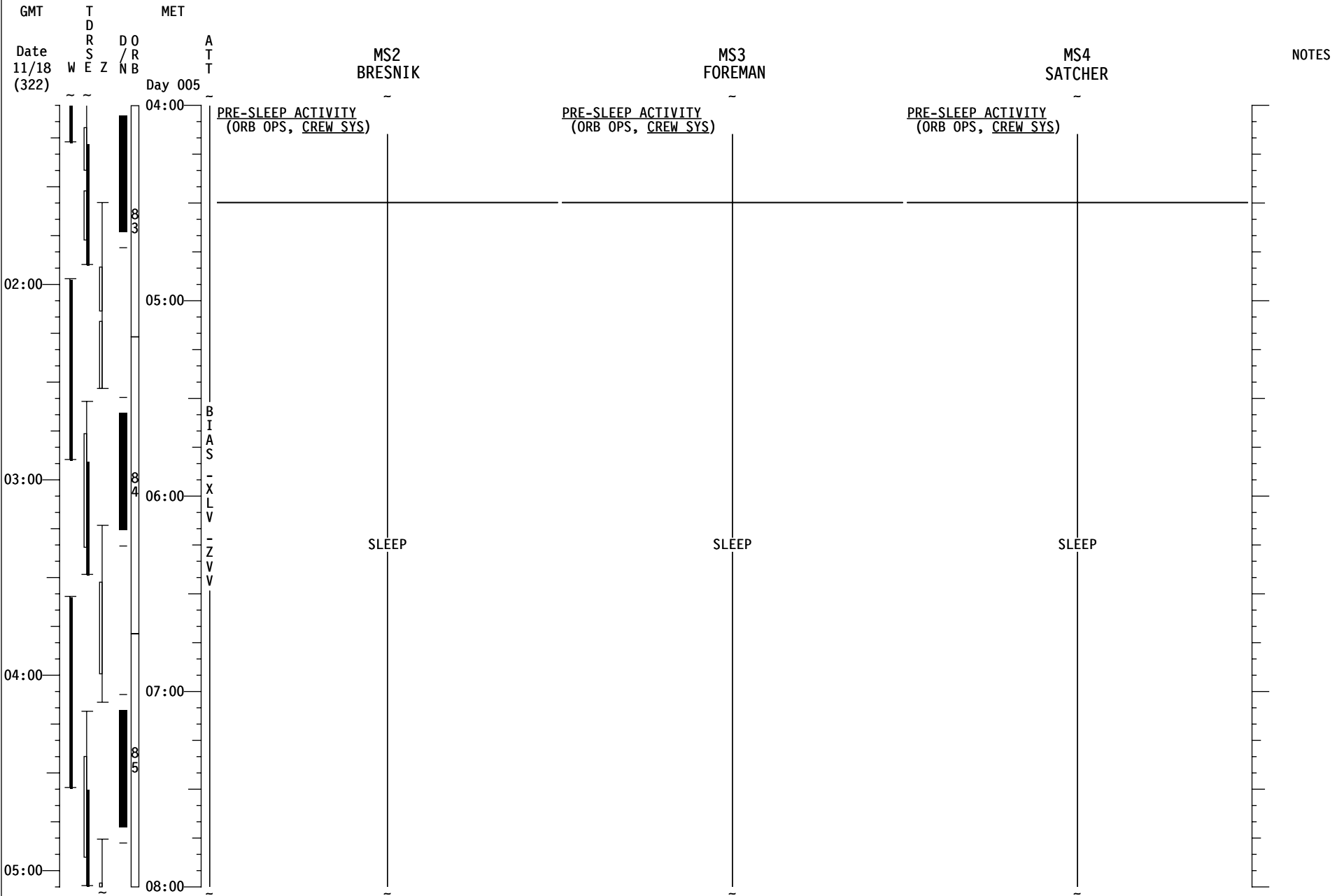
STS-129/ULF3 FD06



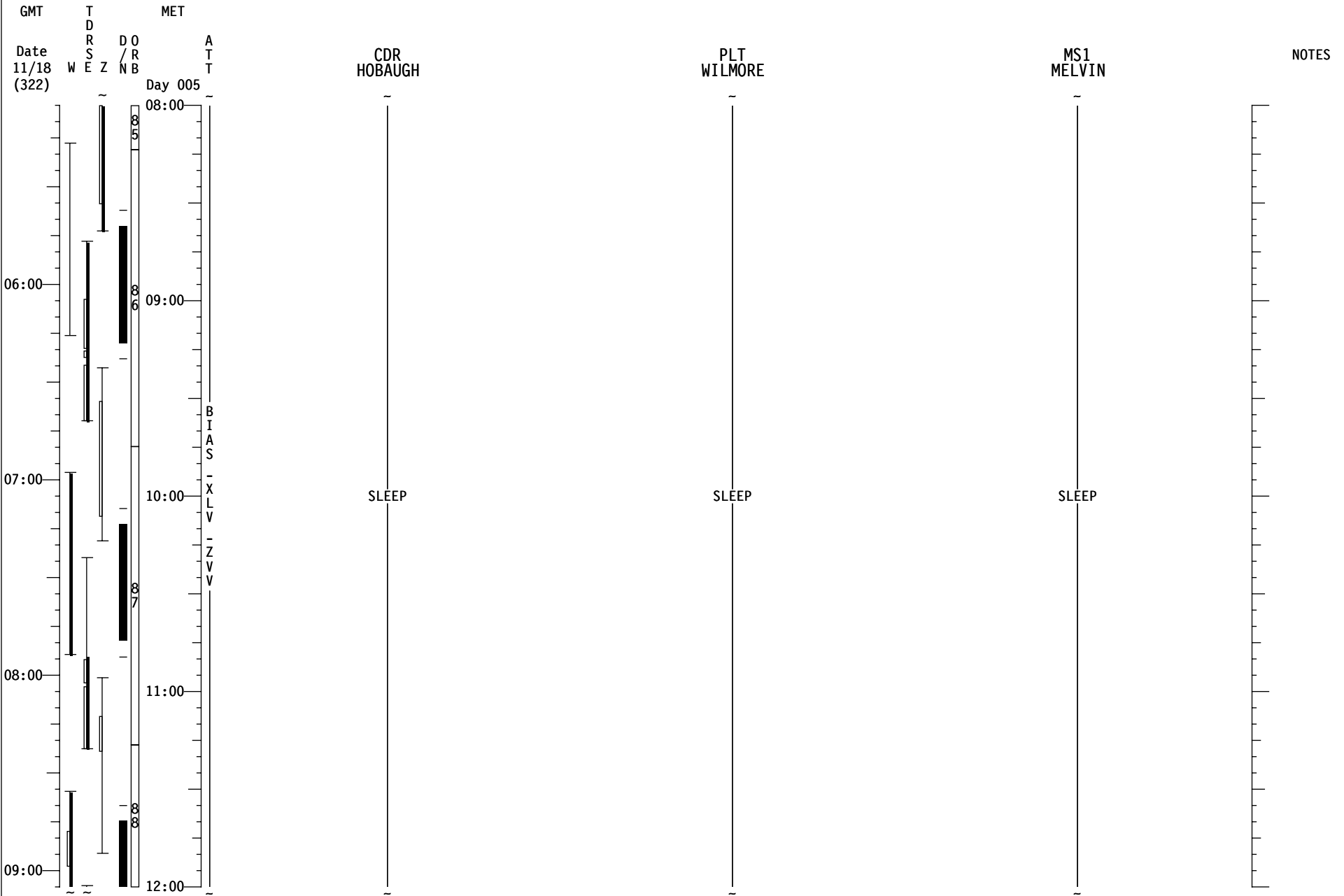
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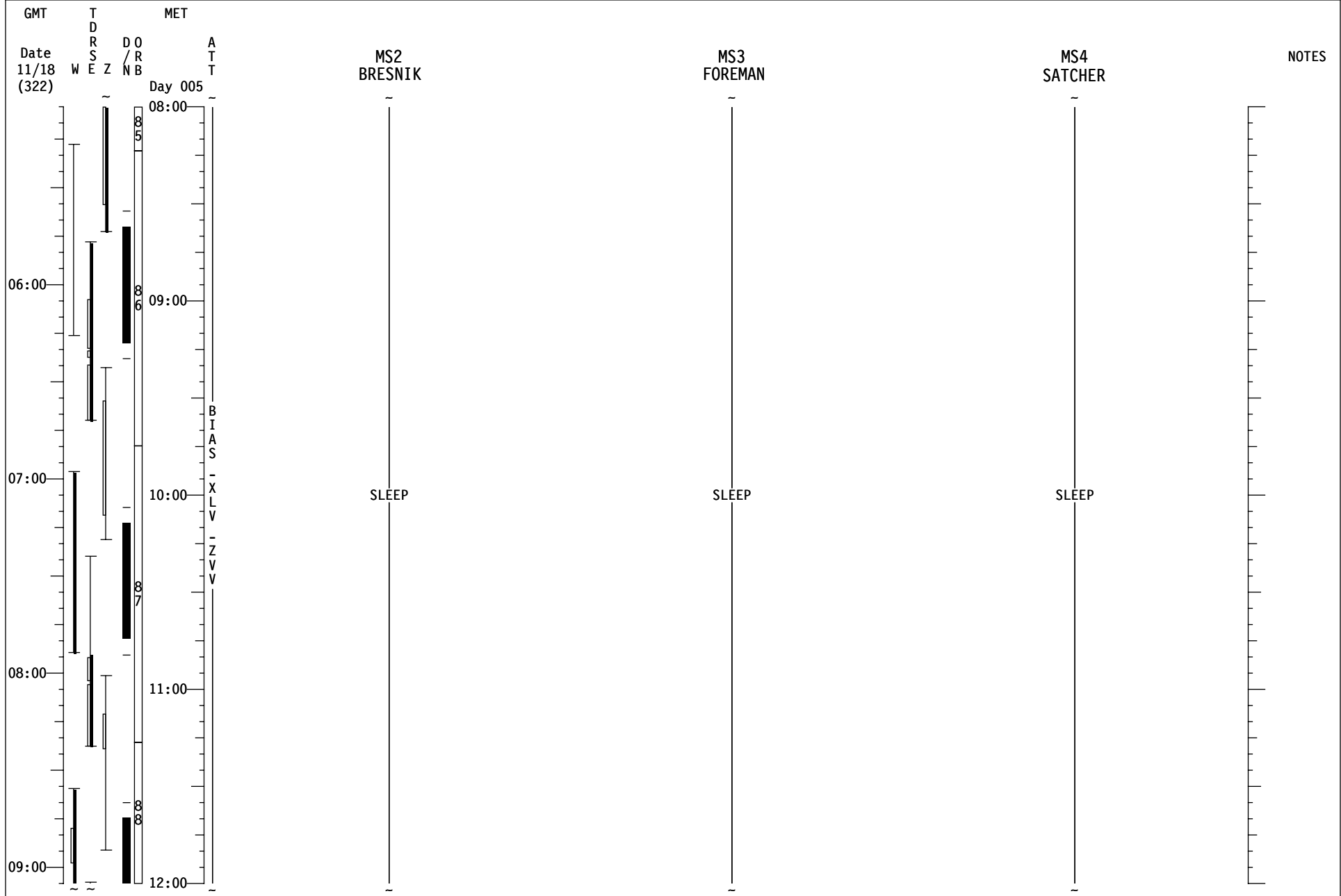
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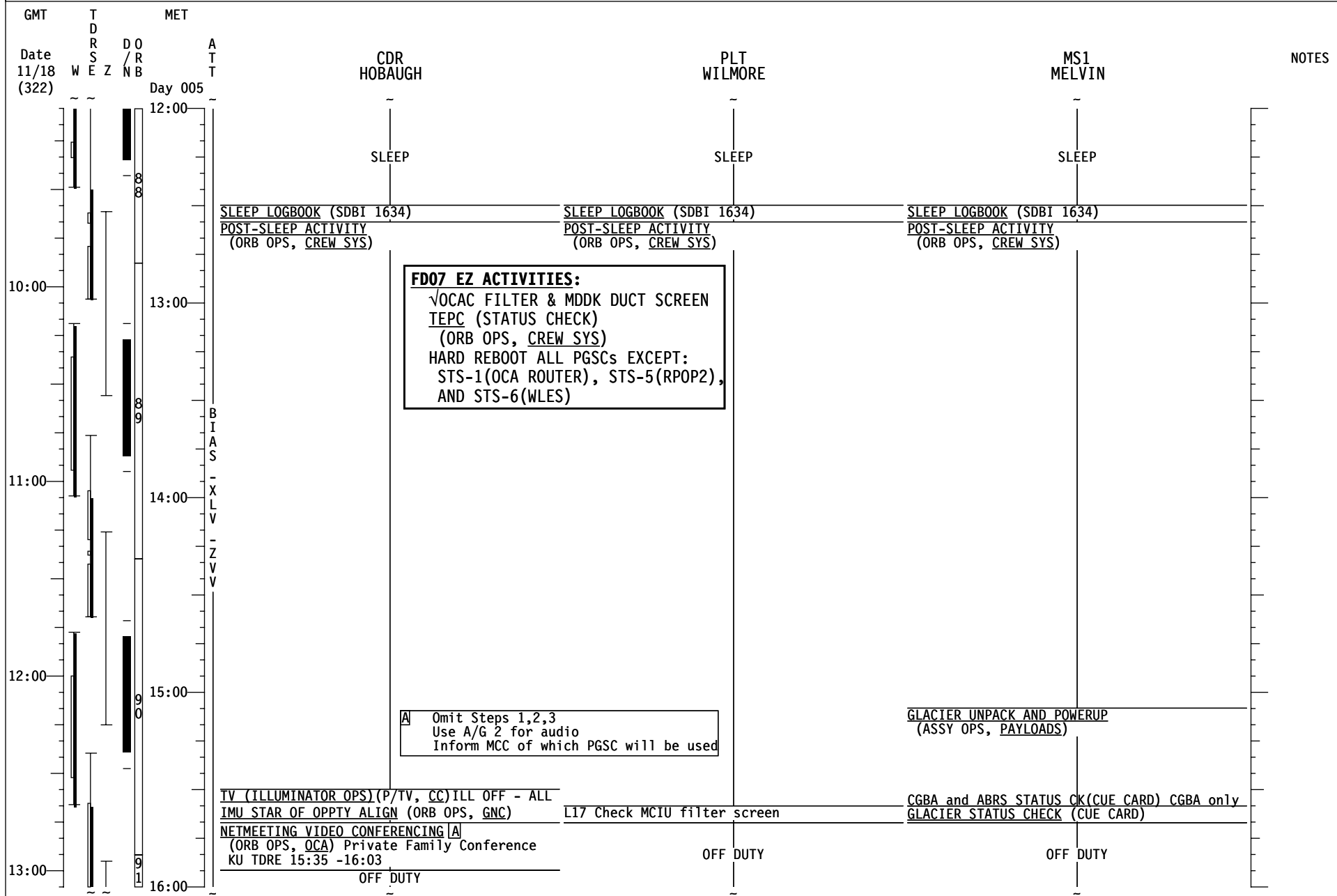
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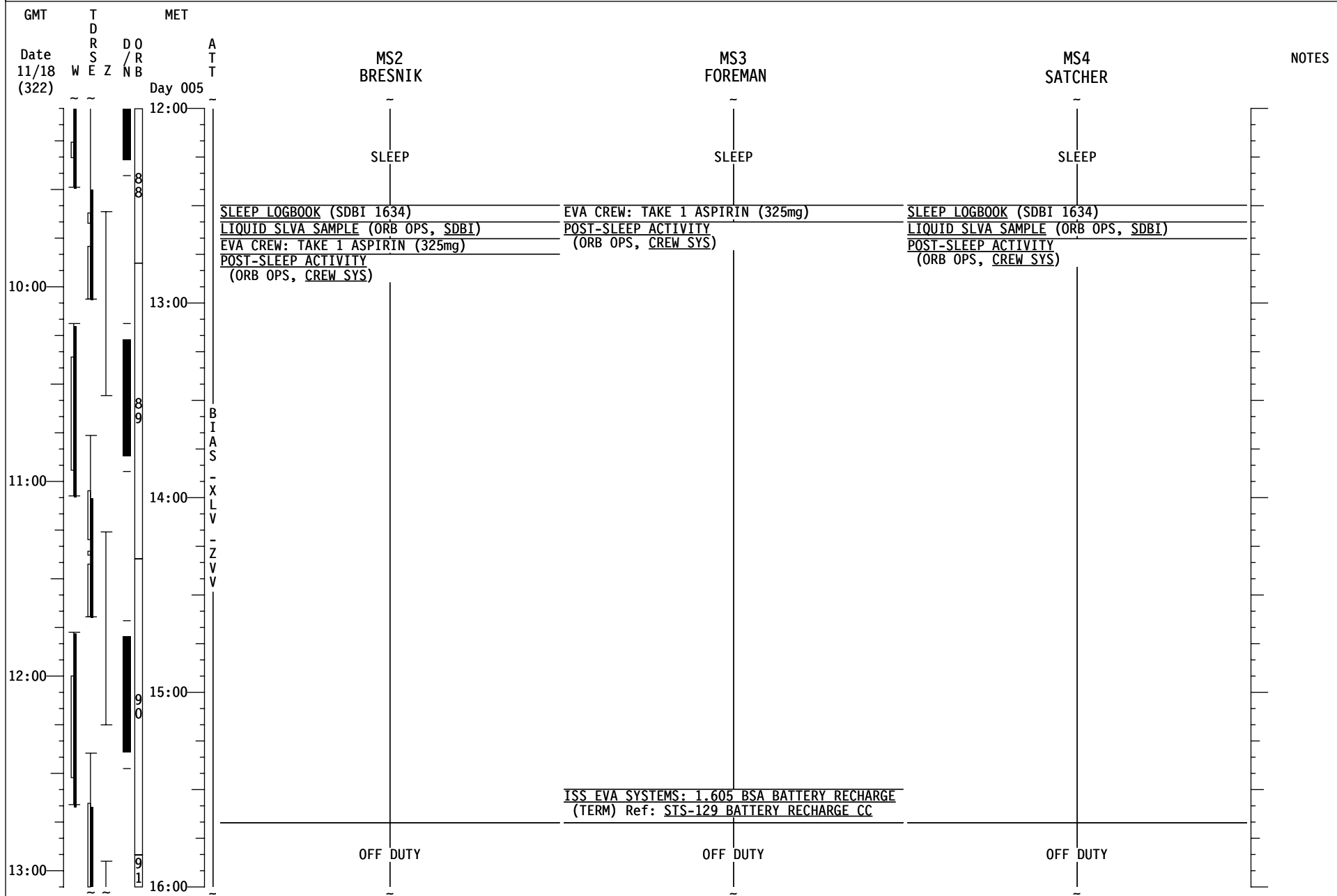
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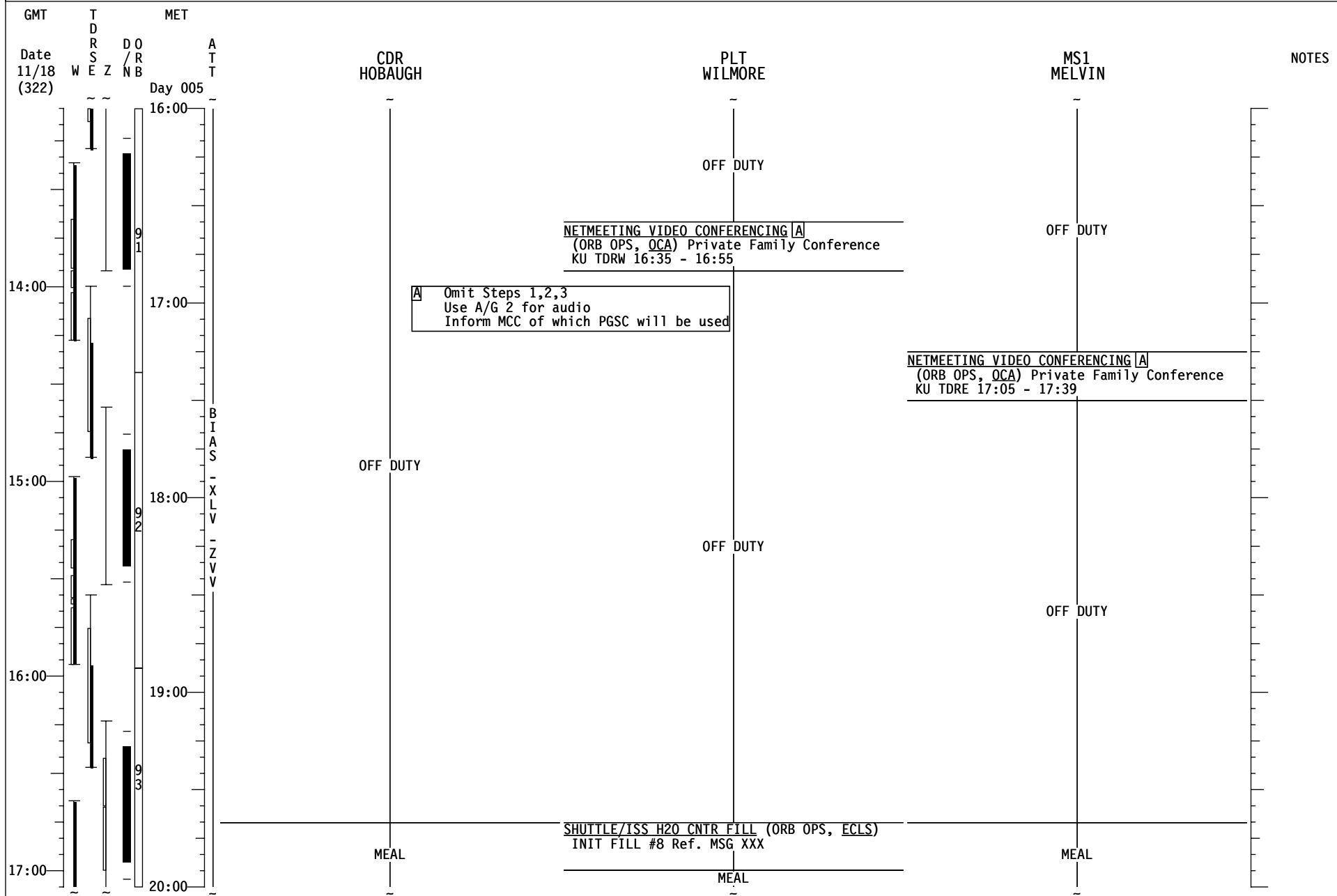
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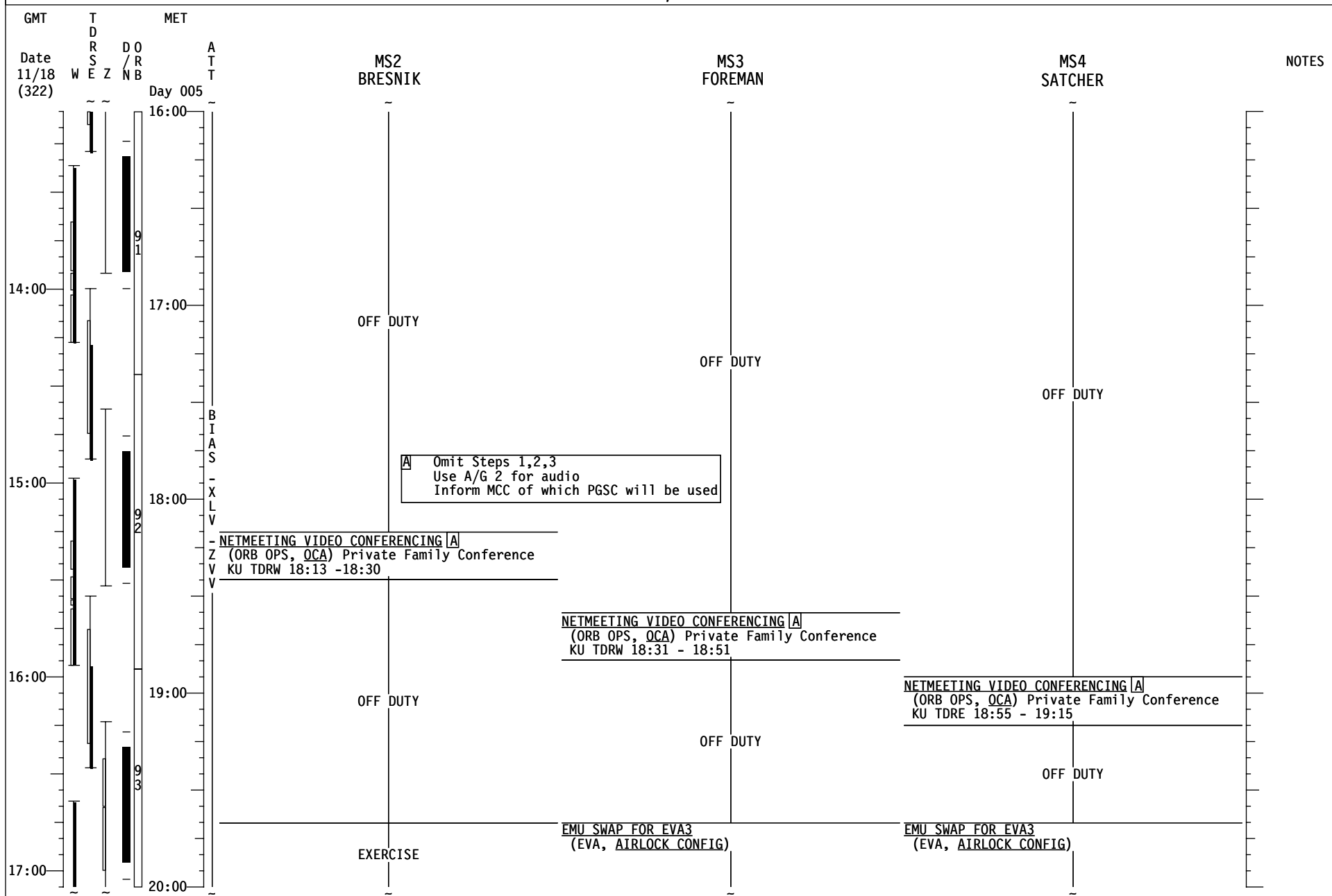
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STS-129/ULF3 FD07



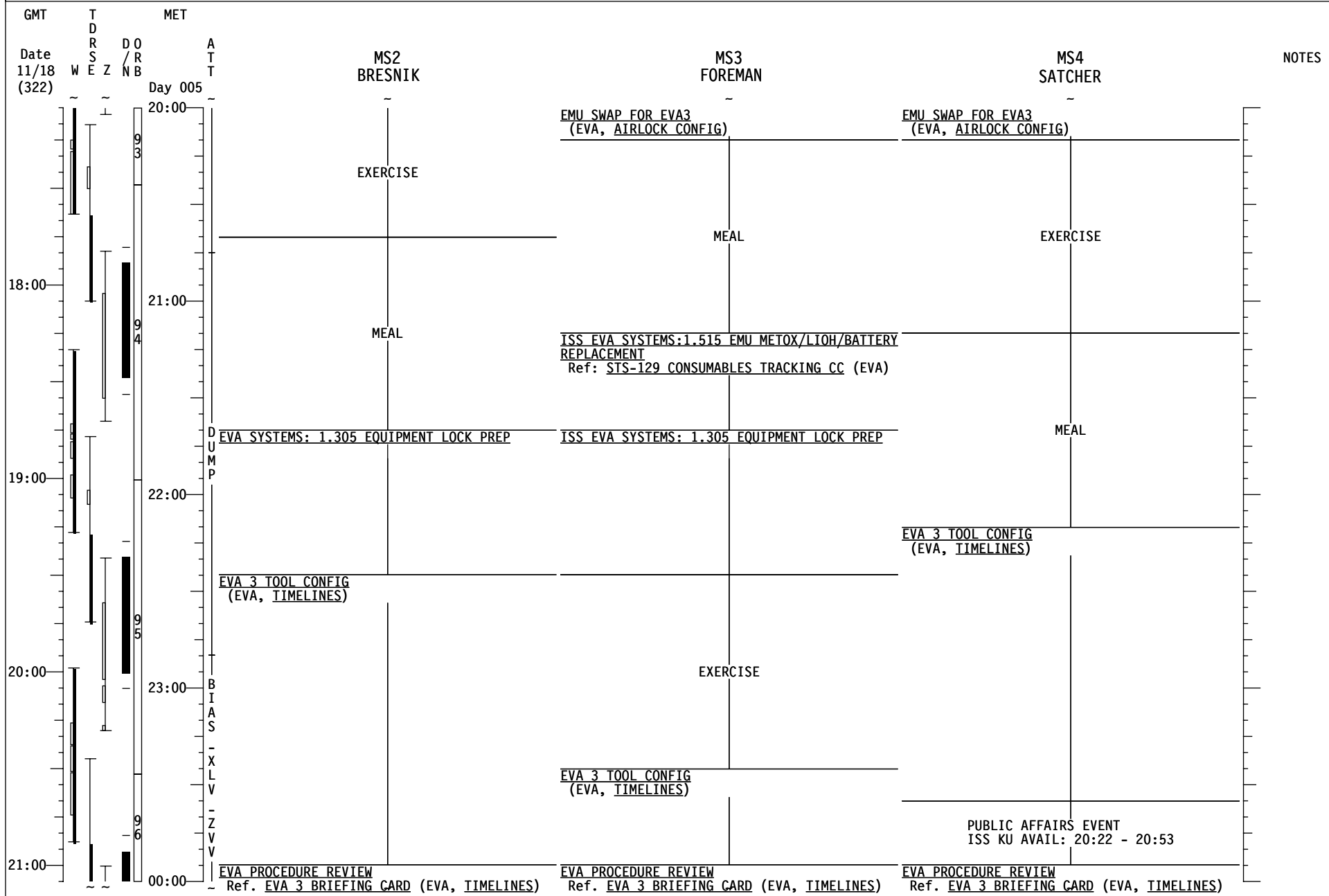
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GMT	TDRS W E Z	MET Day 005	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
18:00				MEAL	MEAL	MEAL	
				B A12/AUTO/VERN When ISS in Free Drift, DAP: LVLH When jet activity stopped for > 5sec, DAP: FREE >2sec, Then DAP: AUTO			
				H/O ATTITUDE CONTROL CMG TA to ORB B			DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX
				MNVR (TRK) BIAS -XLV -ZVV (DUMP) TG=2 BV=5 P=163 Y=358 OM=194 A12/AUTO/VERN Init TRK When in attitude: DAP:B12			
				CWC OVERBOARD DUMP (ORB OPS, ECLS) Initiate Condensate Dump	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		TRANSFER OPS Ref. Transfer List & MSG XXX
				N2 REPRESS USING PAYLOAD N2 VLVS C	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #9 Ref. MSG XXX		
				PUBLIC AFFAIRS EVENT ISS KU AVAIL: 18:27 - 19:05	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 18:27 - 19:05	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 18:27 - 19:05	
19:00				C N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS SETUP AND INIT Steps 1, 3-7 MCC will TMBU S/W FDA	TRANSFER OPS Ref. Transfer List & MSG XXX	D N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS TERM AND RECONFIG Steps 8-13 MCC will TMBU S/W FDA	
				CWC OVERBOARD DUMP (ORB OPS, ECLS) Perform DUMP TERMINATION		EXERCISE	
				PWR DUMP - SUPPLY LINE (ORB OPS, ECLS) Dump SN TBS (Barcode #TBS) Dump dur. ~30 min	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		
				MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=163 Y=358 OM=168 A12/AUTO/VERN Init TRK	CWC TRANSFER Transfer 2 CWCs to ISS	CUCU TRANSFER & INSTALL Ref. Transfer List & MSG XXX	
20:00				A N2 REPRESS USING PAYLOAD N2 VLVS D			TRANSFER OPS Ref. Transfer List & MSG XXX
				- When ISS is GO for deadband collapse, DAP:B13	SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform CHANGEOUT Use CWC S/N XXX		
				- When ISS is Go for att. control, DAP:FREE Z Then select DAP A, DAP:A12/FREE/VERN			
21:00					PUBLIC AFFAIRS EVENT ISS KU AVAIL: 20:22 - 20:53	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 20:22 - 20:53	
				EVA PROCEDURE REVIEW Ref. EVA 3 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref. EVA 3 BRIEFING CARD (EVA, TIMELINES)		

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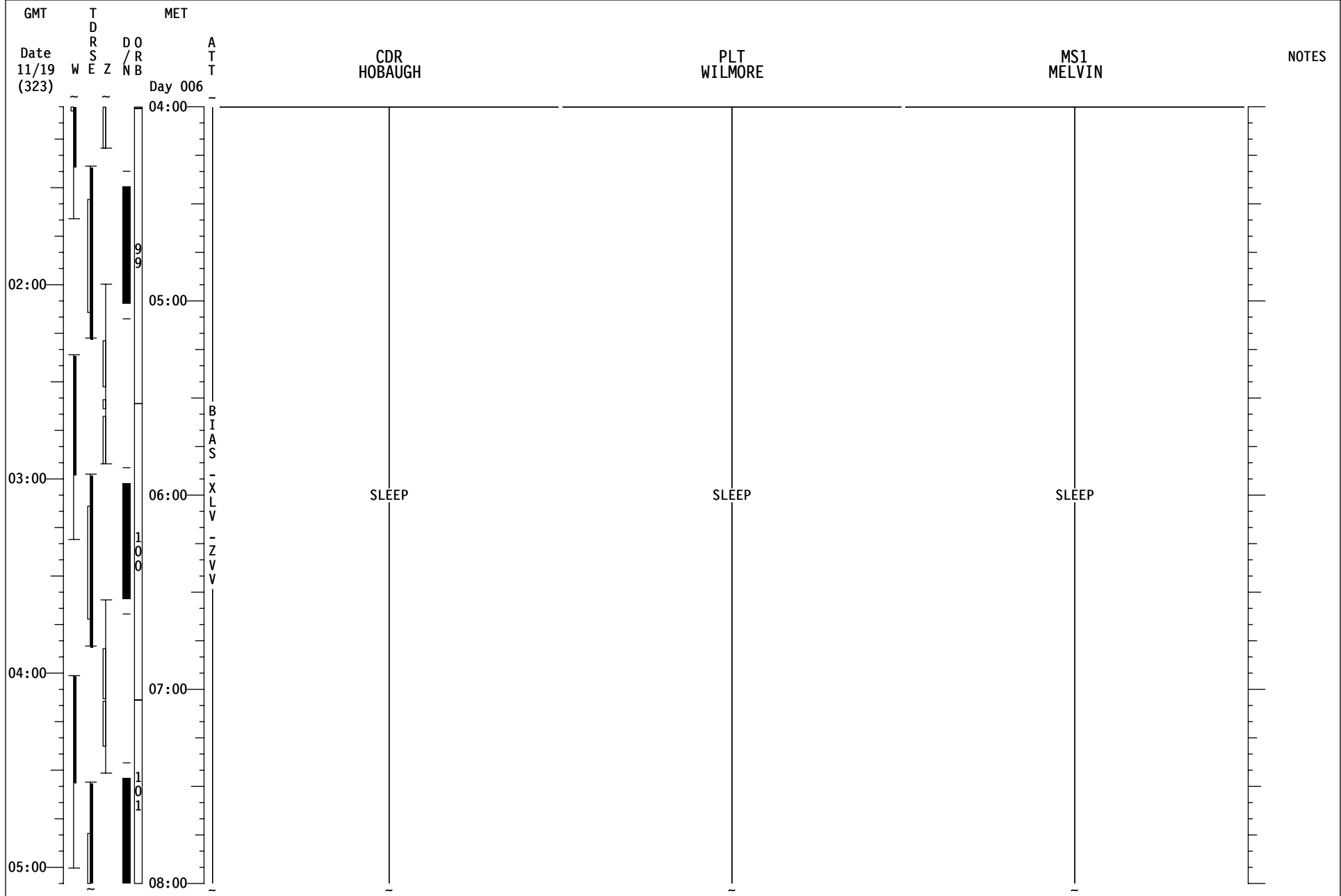
STS-129/ULF3 FD07

GMT	T D R S W E Z	MET	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/18 (322)		Day 006					
				<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	
22:00				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC		<u>CGBA and ABRS STATUS CK (CUE CARD) CGBA only</u> <u>GLACIER STATUS CHECK (CUE CARD)</u> <u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
					EXERCISE ARED is available	<u>TRANSFER TAGUP</u> Coordinate with transfer counterparts	
23:00				EXERCISE ARED is available		<u>TRANSFER BRIEF</u> Call down status to MCC	
					<u>TV (ILL OPS)(P/TV, CC)ILL ON - A,D</u>	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
00:00				<u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2			
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
01:00							
04:00							

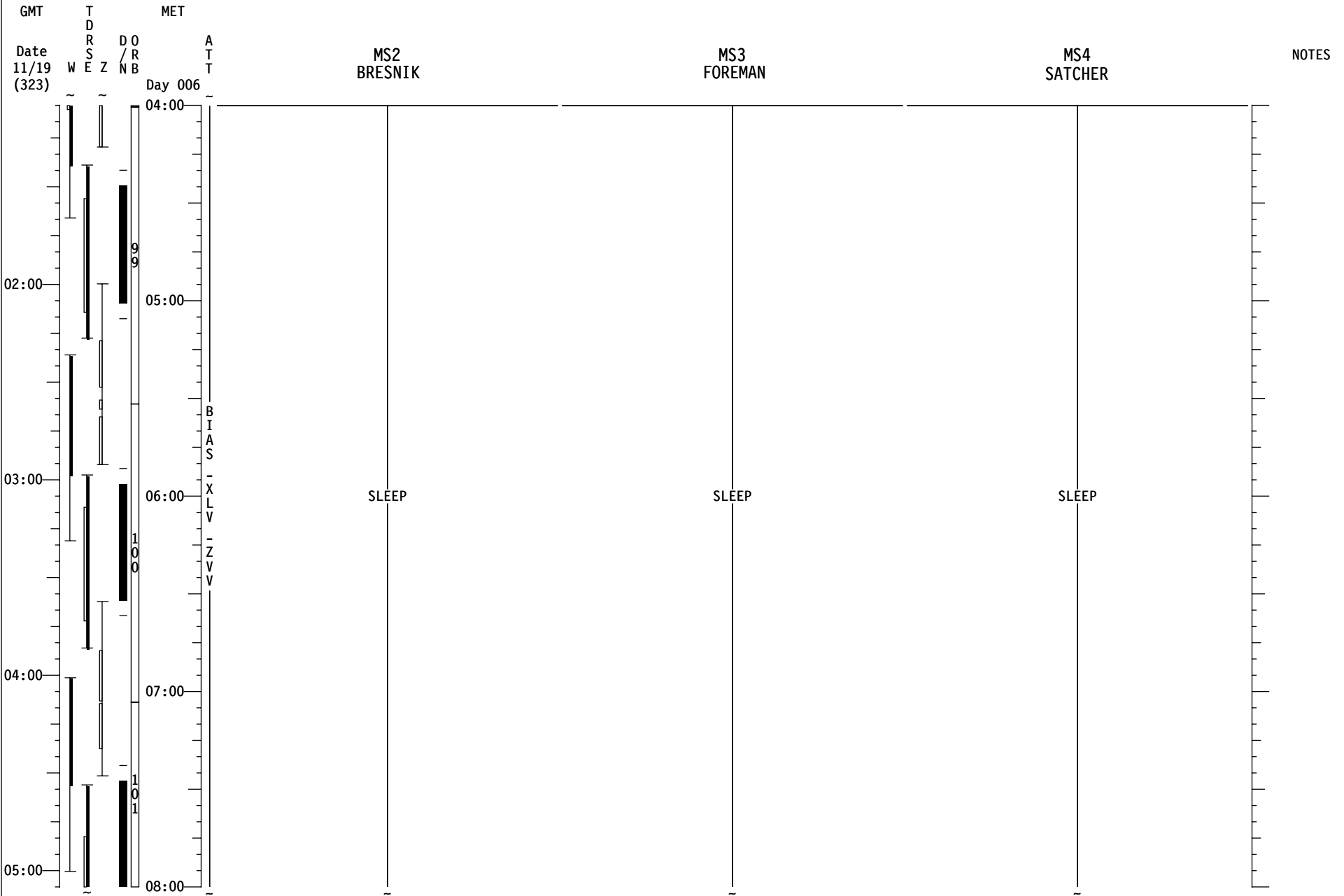
STS-129/ULF3 FD07

GMT	TDRS W E Z	MET Day 006	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
11/18 (322)						
		00:00	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	
22:00		01:00	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST EVA CONFERENCE</u> Media format: Crew preference Discuss EVA and future impacts	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
23:00		02:00		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
		03:00	<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT</u> <u>MASK PREBREATHE</u>		<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT</u> <u>MASK PREBREATHE</u>	
00:00		04:00	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	

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STS-129/ULF3 FD07



MS2
BRESNIK

MS3
FOREMAN

MS4
SATCHER

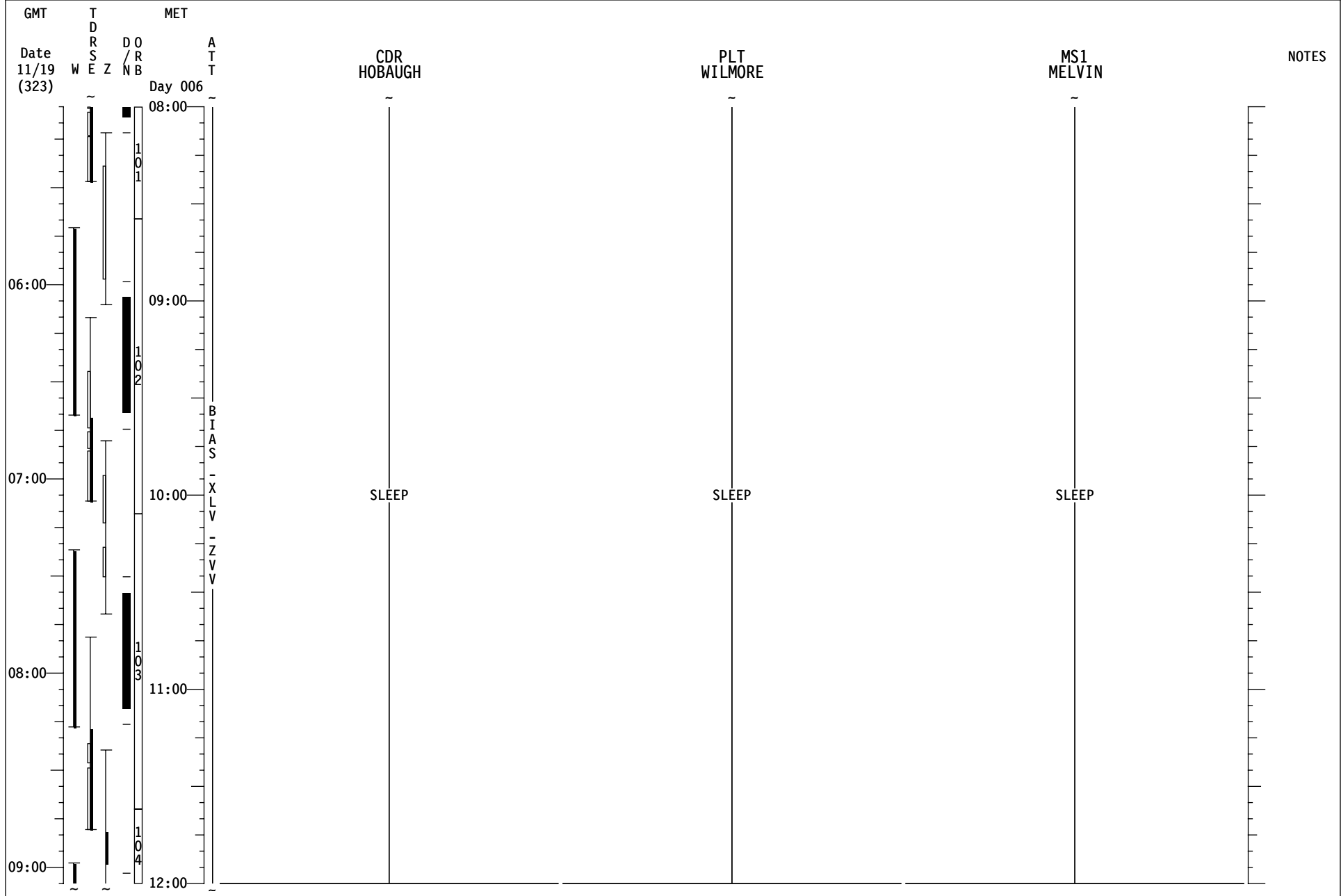
NOTES

SLEEP

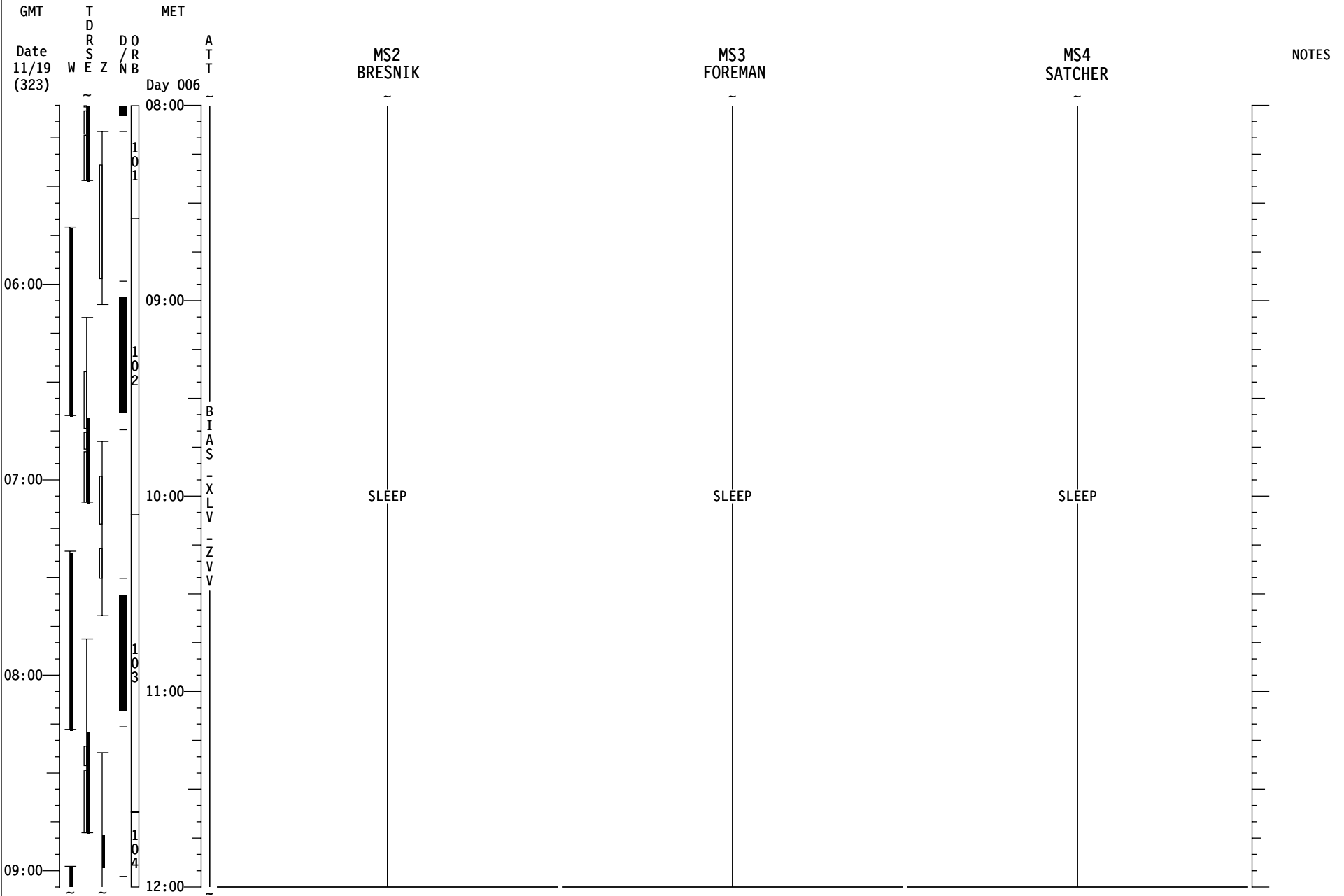
SLEEP

SLEEP

STS-129/ULF3 FD07



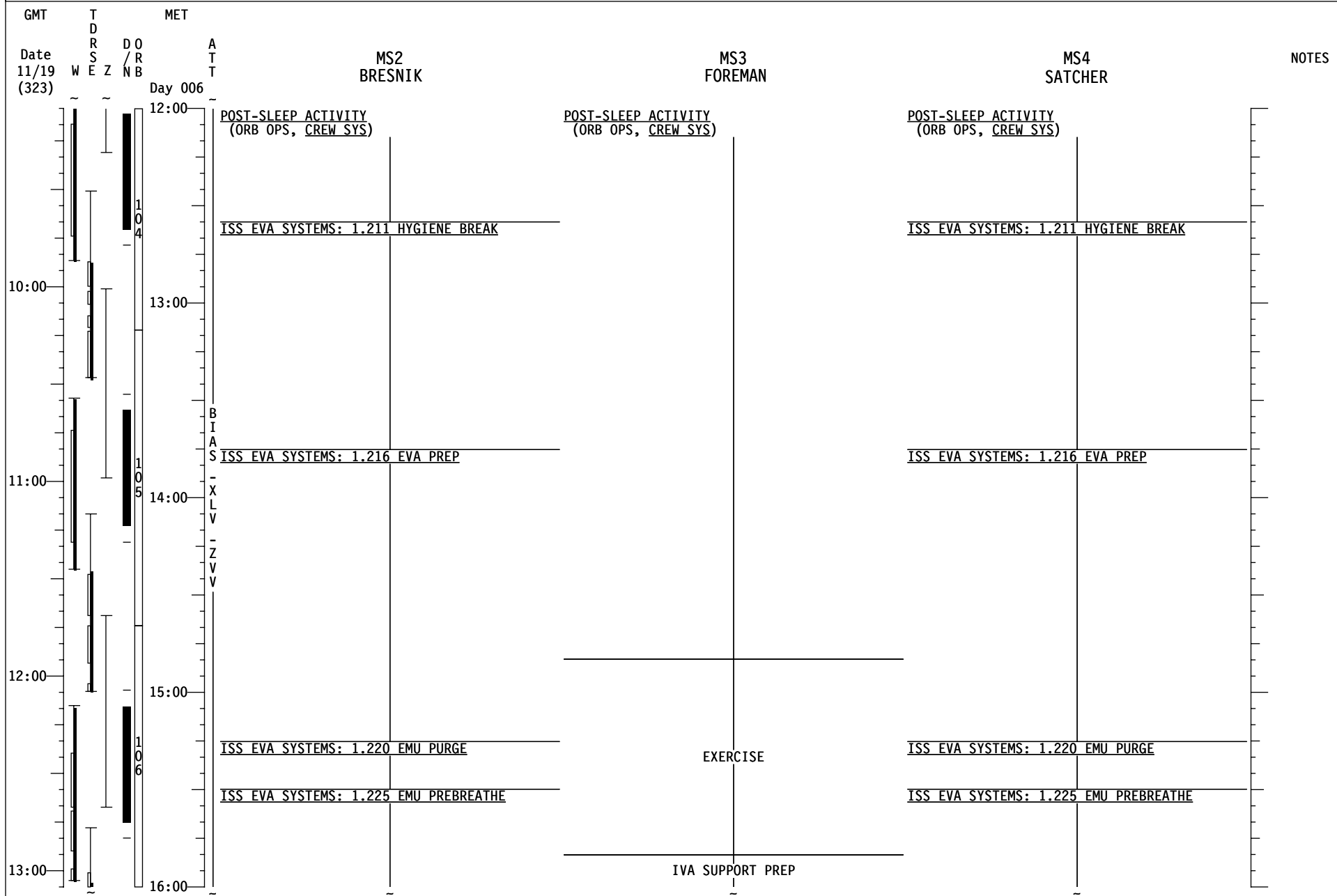
STS-129/ULF3 FD07



STS-129/ULF3 FD08

GMT	T D R S W E Z	MET Day 006	A T T C D R H O B A U G H	P L T W I L M O R E	M S 1 M E L V I N	N O T E S
12:00			SLEEP LOGBOOK (SDBI 1634) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (SDBI 1634) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (SDBI 1634) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
			PRIVATE MEDICAL CONFERENCE L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2	FD08 EZ ACTIVITIES: ✓OCAC FILTER & MDDK DUCT SCREEN TEPC (STATUS CHECK) (ORB OPS, CREW SYS) HARD REBOOT ALL PGSCs EXCEPT: STS-1(OCA ROUTER), STS-5 (RPOP2), AND STS-6(WLES)		
10:00			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
				ISS EVA SYSTEMS: 1.211 HYGIENE BREAK		
11:00				ISS EVA SYSTEMS: 1.216 EVA PREP		
12:00			L17 Check MCIU filter screen TV (ILLUMINATOR OPS)(P/TV, CC)ILL OFF - ALL IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)			
			EVA 3 INHIBIT PAD (EVA, TIMELINES)			
			WCS COMPACTOR OPS (DUAL-VANE) (CUE CARD)	ISS EVA SYSTEMS: 1.220 EMU PURGE		CGBA and ABRS STATUS CK(CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD)
			SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #10 Ref. MSG XXX			P/TV09 GLACIER (PHOTO/TV, SCENES) Perform Video, Photos
			TRANSFER OPS Ref. Transfer List & MSG XXX	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE		GLACIER SET POINT (ASSY OPS, PAYLOADS)
						DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX
13:00						TRANSFER OPS Ref. Transfer List & MSG XXX
16:00						

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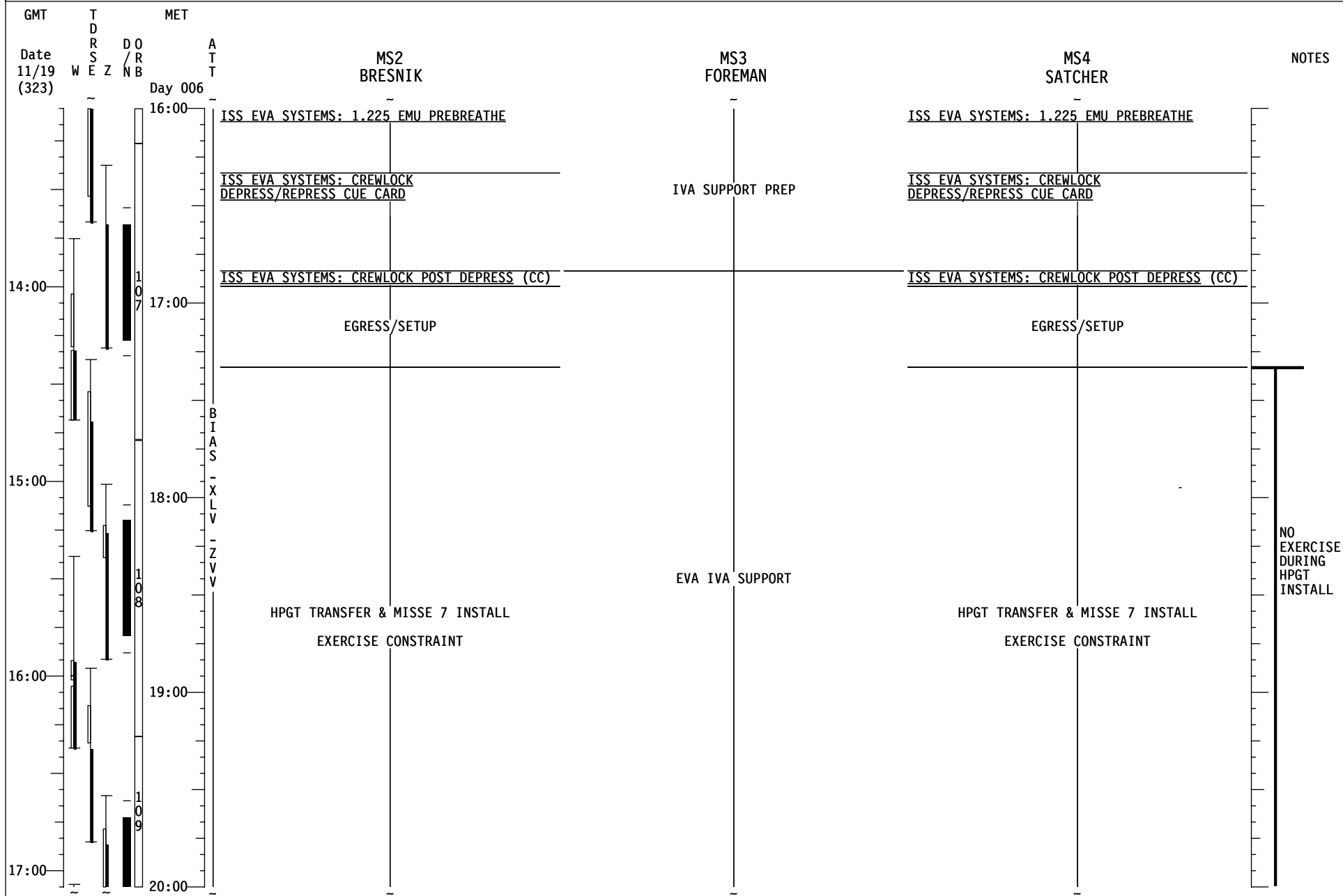


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GMT	T D R S E Z	MET	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/19 (323)	W E Z	Day 006					
16:00				TRANSFER OPS Ref. Transfer List & MSG XXX	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	TRANSFER OPS Ref. Transfer List & MSG XXX	
				N2 REPRESS USING PAYLOAD N2 VLVS [A] P/TV07 EVA (PHOTO/TV, SCENES) Setup	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD		
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
14:00				P/TV07 EVA (PHOTO/TV, SCENES) Ops	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	EXERCISE	
					ROBOTICS: 1.410 EVA3- HPGT TRANSFER	ROBOTICS: 1.410 EVA3- HPGT TRANSFER	
				[A] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS SETUP AND INIT Steps 1, 3-7 MCC will TMBU S/W FDA			
				[B] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS TERM AND RECONFIG Steps 8-13 MCC will TMBU S/W FDA			
15:00				Z N2 REPRESS USING PAYLOAD N2 VLVS [B] V PWR FILL (ORB OPS, ECLS) Init Fill #1 Fill dur ~30 min Ref. MSG XXX			
				PWR FILL (ORB OPS, ECLS) Init Fill #2 Fill dur ~30 min Ref. MSG XXX			
16:00				PWR FILL (ORB OPS, ECLS) Init Fill #3 Fill dur ~30 min Ref. MSG XXX			
17:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #11 Ref. MSG XXX			

NO EXERCISE DURING HPGT INSTALL

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STS-129/ULF3 FD08

GMT	T D R S E Z	MET	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/19 (323)	W E Z	Day 006	D O R N B				
18:00		20:00		SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #10 Ref. MSG XXX	ROBOTICS: 1.410 EVA3- HPGT TRANSFER	ROBOTICS: 1.410 EVA3- HPGT TRANSFER	NO EXERCISE DURING HPGT INSTALL
				MEAL	MEAL	MEAL	NO UNISOLATED EXERCISE DURING PAS DEPLOY (NO ERGOMETER, HC-1, OR VELO)
		21:00		SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
				CWC TRANSFER Transfer 2 CWCs to ISS	TRANSFER OPS Ref. Transfer List & MSG XXX	TRANSFER OPS Ref. Transfer List & MSG XXX	
		22:00		P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) X L V Setup, Perform Step 2			
				P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) Z V V When SETUP, Step 2 complete, Perform OPS, Item 2			
		20:00		JOINT OPS: 3.103 NITROGEN XFER TERMINATION Steps 3-5.1 Notify MCC-H when complete	EXERCISE		
		23:00					
				ISS EVA SYSTEMS: PRE REPRESS (CC) ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD			
				TV (ILL OPS) (P/TV, CC) ILL ON - A,D PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	EVA SYSTEMS: 1.240 POST EVA With H2O		
21:00		00:00			Ref: STS-129 CONSUMABLES TRACKING CC (EVA)		

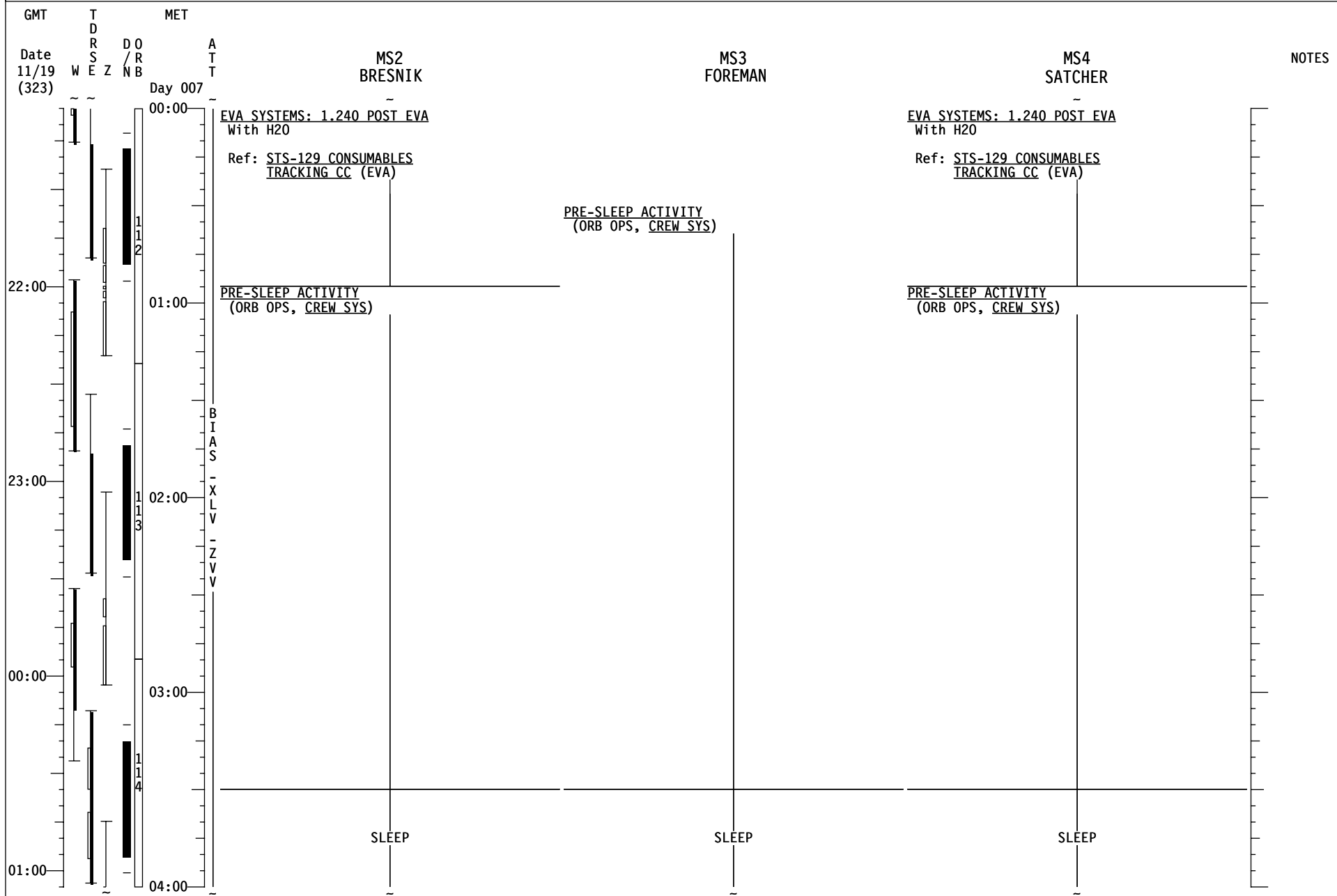
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GMT	T D R S W E Z	MET Day 006	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
18:00		20:00	HPGT TRANSFER & MISSE 7 INSTALL EXERCISE CONSTRAINT		HPGT TRANSFER & MISSE 7 INSTALL EXERCISE CONSTRAINT	NO EXERCISE DURING HPGT INSTALL
		21:00	S3 ZENITH/INBD PAS DEPLOY EXERCISE CONSTRAINT		S3 ZENITH/INBD PAS DEPLOY EXERCISE CONSTRAINT	
19:00		22:00	A/L MMOD SHIELDS	EVA IVA SUPPORT		NO UNISOLATED EXERCISE DURING PAS DEPLOY (NO ERGOMETER, HC-1, OR VELO)
		23:00	GET AHEADS		GET AHEADS	
20:00			EVA CLEANUP & INGRESS		EVA CLEANUP & INGRESS	
			<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u>		<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u>	
			<u>ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD</u>	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD</u>	
			<u>EVA SYSTEMS: 1.240 POST EVA With H2O</u>		<u>EVA SYSTEMS: 1.240 POST EVA With H2O</u>	
21:00		00:00	Ref: <u>STS-129 CONSUMABLES TRACKING CC (EVA)</u>		Ref: <u>STS-129 CONSUMABLES TRACKING CC (EVA)</u>	

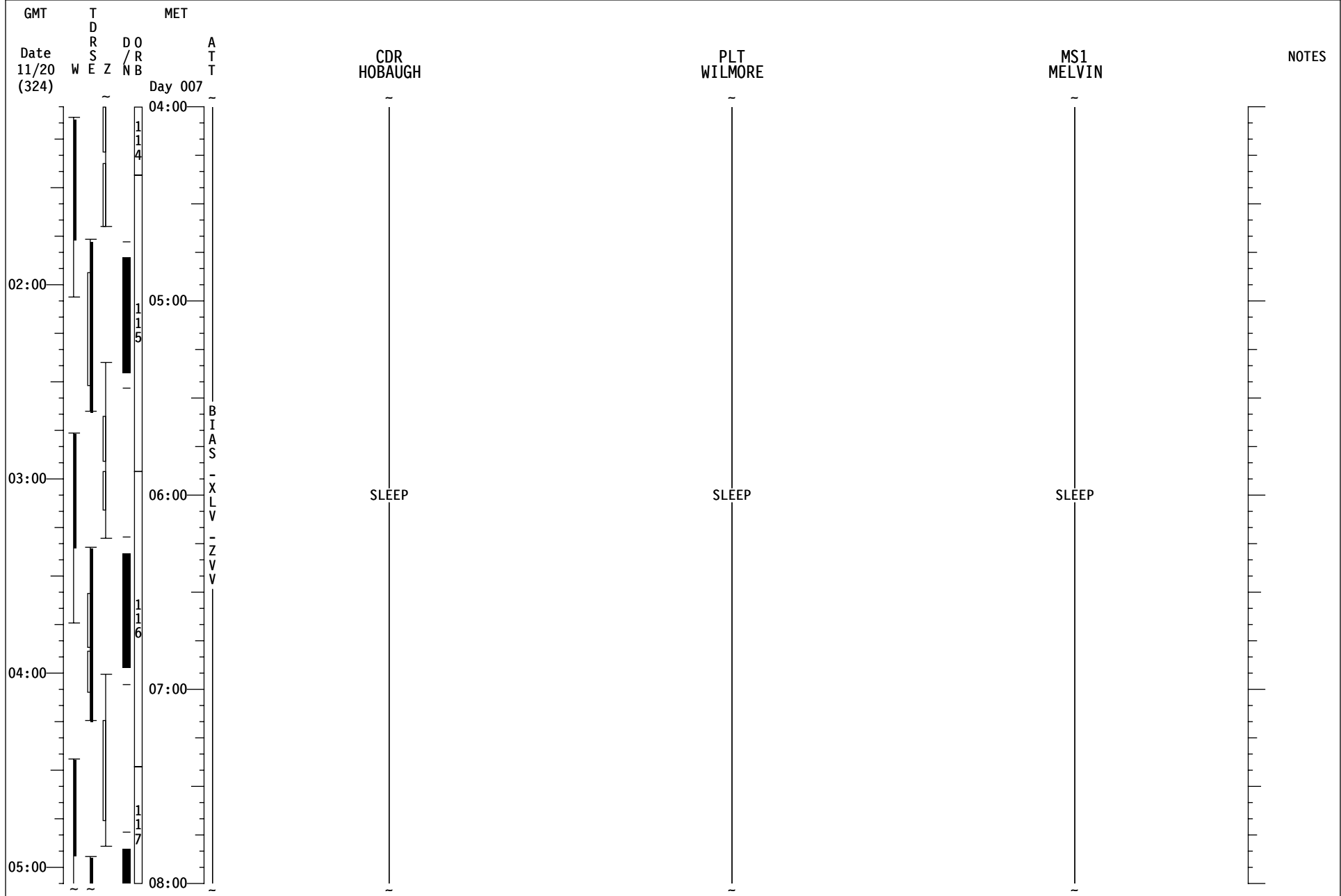
STS-129/ULF3 FD08

GMT	T D R S W E Z	MET	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/19 (323)		Day 007					
00:00					<p><u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O</p> <p>Ref: <u>STS-129 CONSUMABLES TRACKING CC (EVA)</u></p>	<p><u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX</p>	
22:00					<p><u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)</p>	<p><u>CGBA and ABRS STATUS CK (CUE CARD) CGBA only</u> <u>GLACIER STATUS CHECK (CUE CARD)</u> <u>TRANSFER TAGUP</u> Coordinate with transfer counterparts</p> <p><u>TRANSFER BRIEF</u> Call down status to MCC</p>	
23:00				<p>EXERCISE ARED is available</p>		<p><u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)</p>	
00:00				<p><u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2</p>			
01:00							
03:00							
04:00				SLEEP	SLEEP	SLEEP	

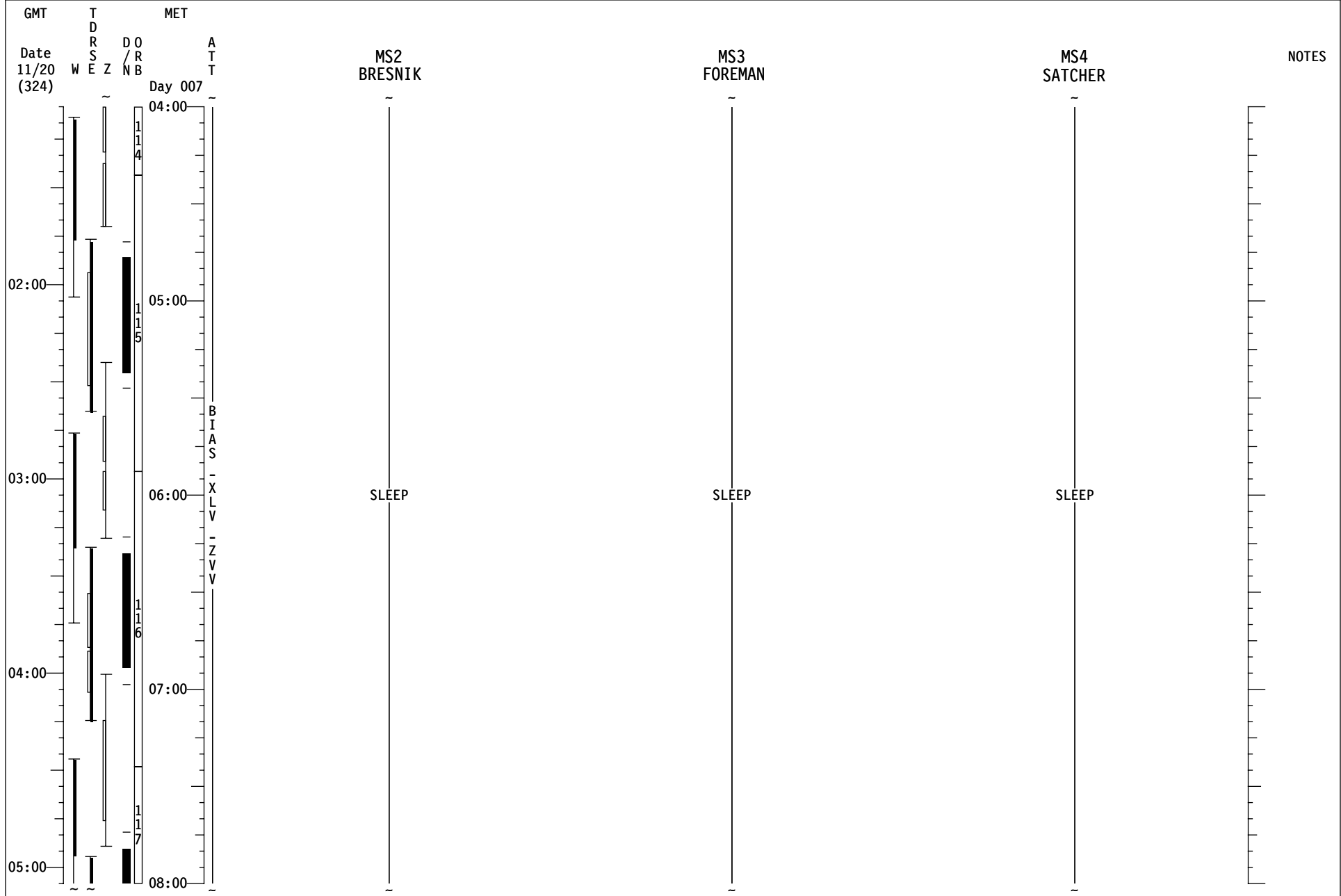
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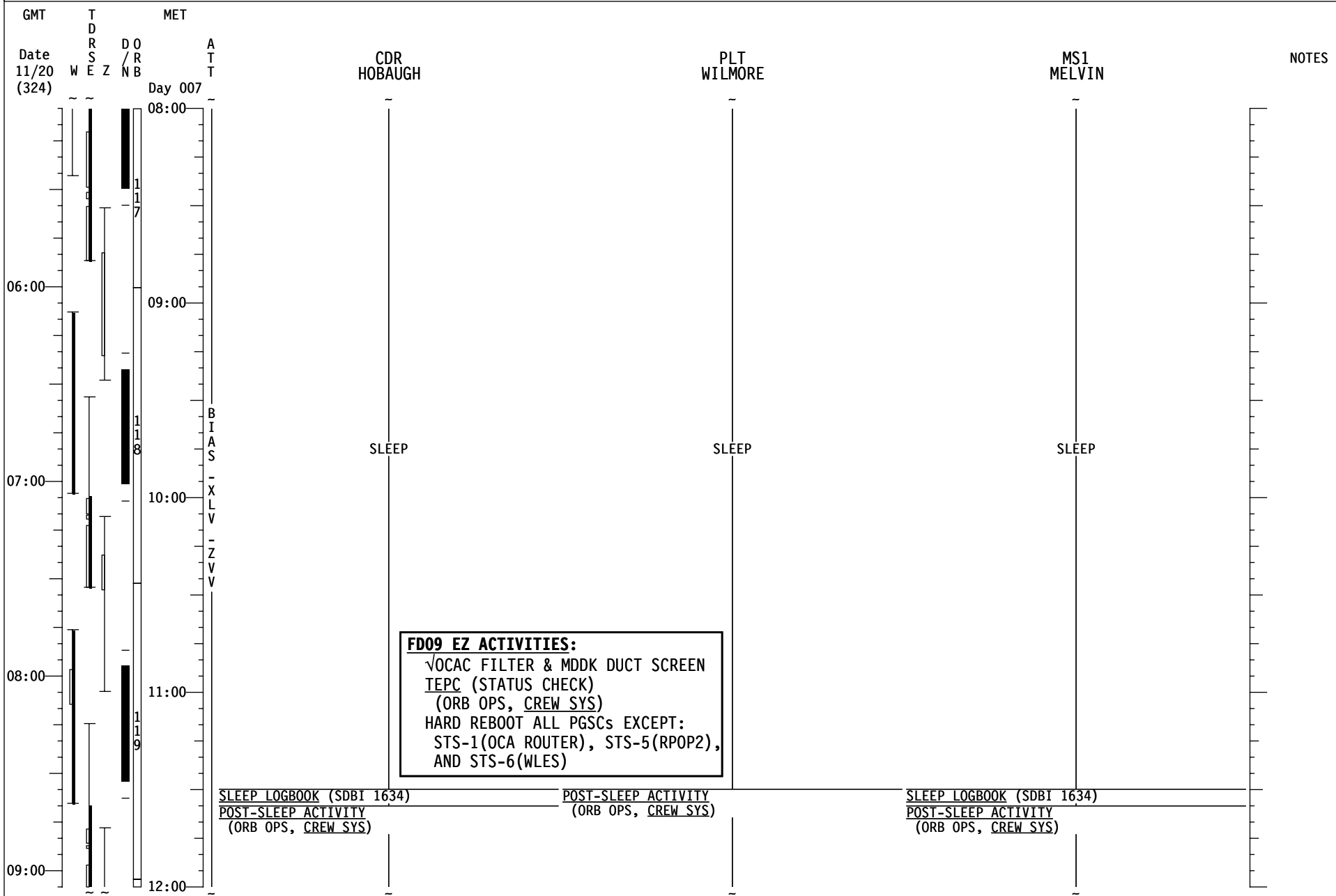
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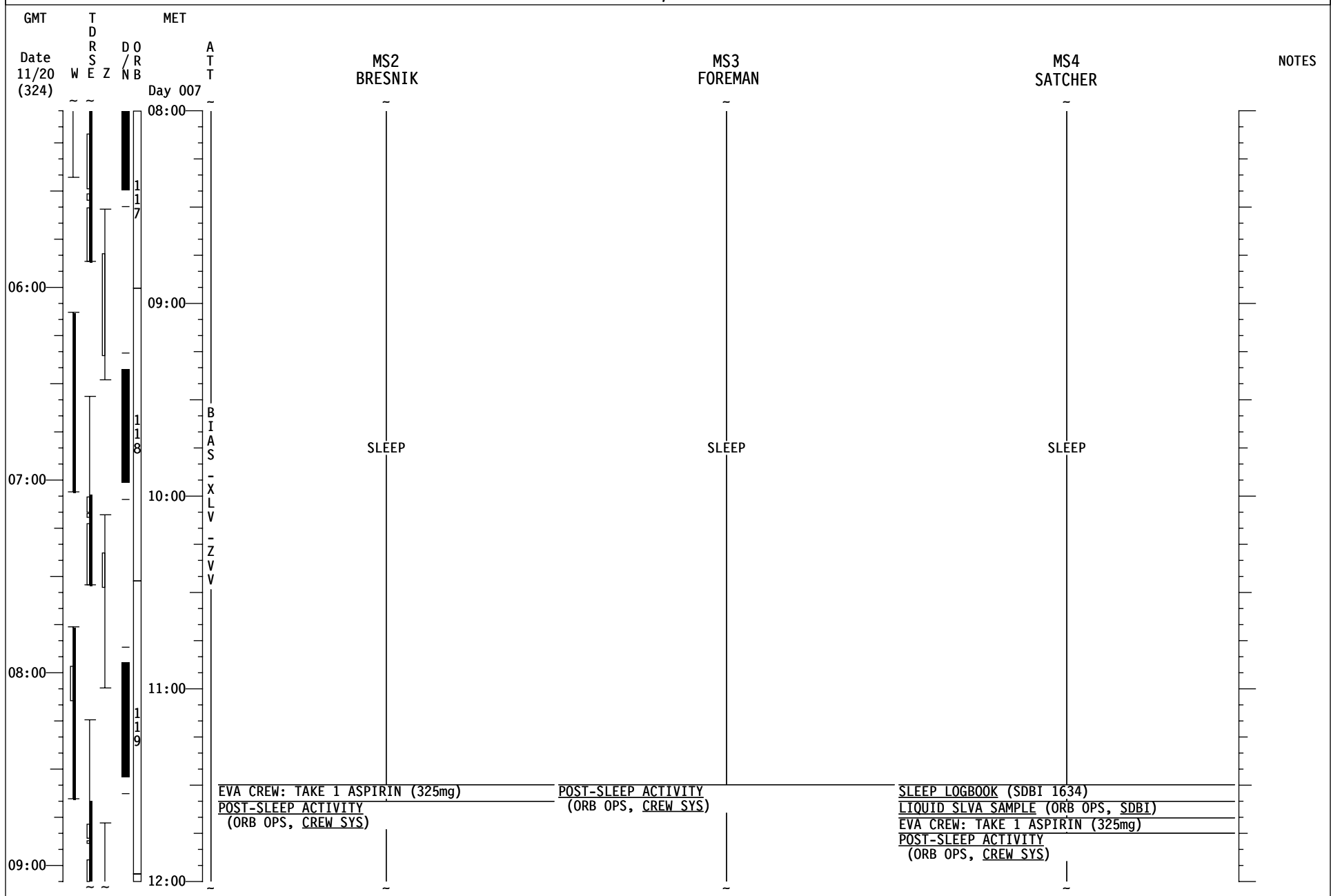
STS-129/ULF3 FD08



STS-129/ULF3 FD09



STS-129/ULF3 FD09



STS-129/ULF3 FD09

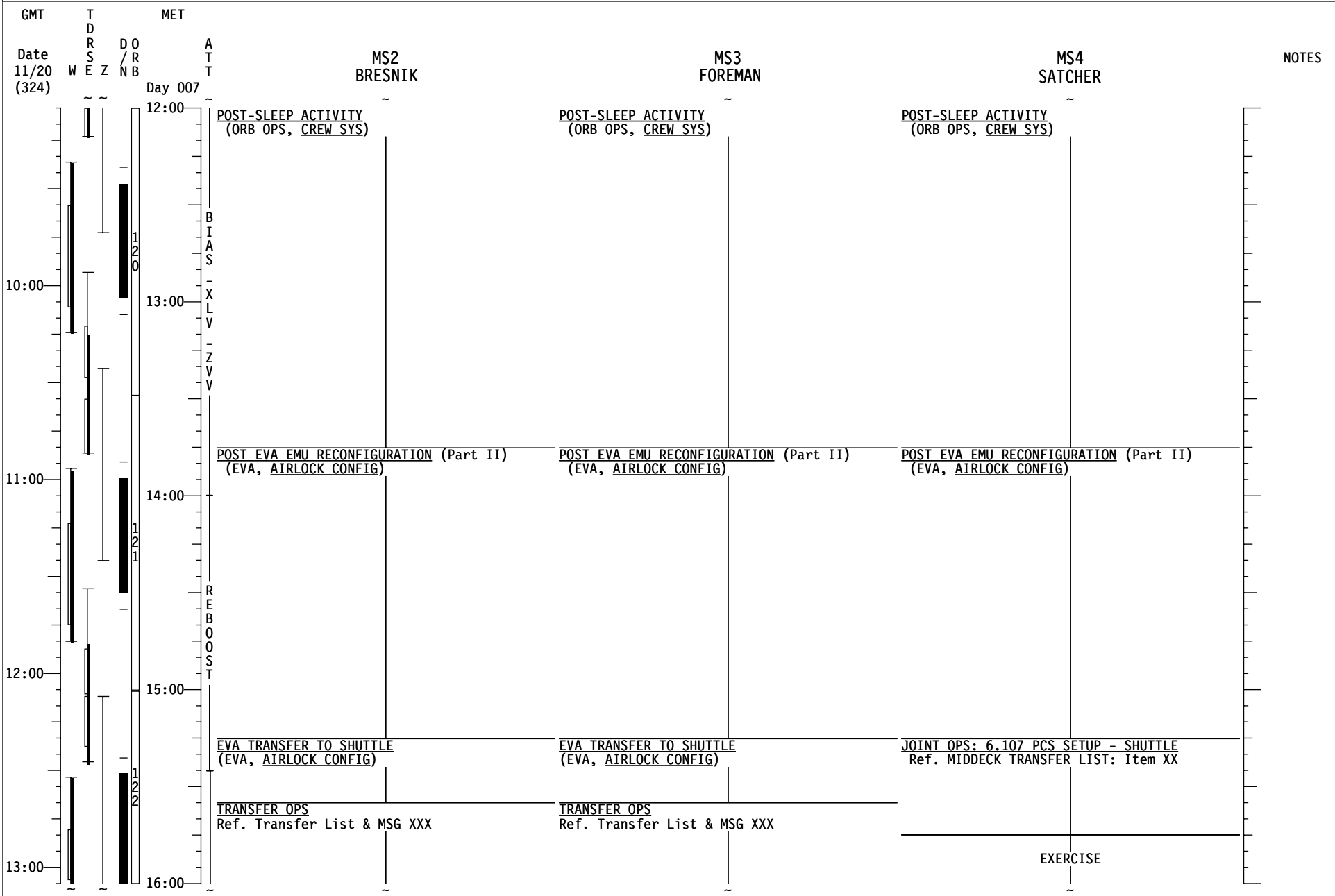
GMT	T D R S W E Z	MET D O R / N B Day 007	A T T C D R H O B A U G H	P L T W I L M O R E	M S 1 M E L V I N	N O T E S
12:00			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
10:00						
11:00						
14:00			TV (ILLUMINATOR OPS)(P/TV, CC)ILL OFF - ALL	IMU STAR OF OPPTY ALIGN (ORB OPS, GNC) H/O ATTITUDE CONTROL CMGA TO to ORBITER/A	CGBA and ABRSTATUS OK(CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD) DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX	
			AUTO REBOOST (INIT) (ORB OPS, REBOOST/DAP) Steps 1-4, CONFIG 3	MNVR TO REBOOST [B] AUTO REBOOST (INIT) (ORB OPS, REBOOST/DAP) Steps 1-4, CONFIG 3	ULF-3 DESCENT SAMPLE TRANSFER FROM MELFI TO GLACIER (ASSY OPS, TRANSFER)	
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #12 Ref. MSG XXX		
12:00			EXERCISE	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	TRANSFER OPS Ref. Transfer List & MSG XXX	
15:00						
			AUTO REBOOST (Term)(ORB OPS, REBOOST/DAP) Step 5 Only, CONFIG 3	AUTO REBOOST (Term)(ORB OPS, REBOOST/DAP) Step 5 Only, CONFIG 3		
			MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=163 Y=358 OM=168 A12/AUTO/VERN Init TRK	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		
13:00			CWC TRANSFER Transfer 1 CWCs to ISS			
16:00						

A When ISS is Free Drift, DAP:LVLH
When jet activity stopped for >5 sec,
DAP: FREE >2 sec, Then DAP: AUTO

B TG=2 BV=5 P=176 Y=0 OM=176
A12/AUTO/VERN Init TRK

C

STS-129/ULF3 FD09



STS-129/ULF3 FD09

GMT	TDRS W E Z	MET Day 007	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00			<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> INIT FILL #13 Ref. MSG XXX	When ISS is Go for att. control, DAP:FREE Then select DAP A, DAP:A12/FREE/VERN L17 Check MCIU filter screen	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
			<u>JOINT OPS: 3.122 PREBREATHE USING SHUTTLE O2 TEARDOWN</u> Steps 2-7 MCC-H will perform Step 2.4 & 5.5	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		
14:00					<u>MDS TRANSFER TO SHUTTLE (ASSY OPS, PAYLOADS) D2xs SETUP (CUE CARD)</u> Perform D2xs PROGRAM in cabin Document MDS in final installed location	
			<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> Perform <u>FILL TERMINATION</u>			
15:00			<u>CWC TRANSFER</u> Transfer 1 CWCs to ISS	<u>SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS)</u> Perform <u>CHANGEOUT</u> Use CWC S/N XXX, Ref. MSG XXX	<u>TRANSFER BRIEF</u> Call down status to MCC	
18:00			CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	
			CREW PHOTO	CREW PHOTO	CREW PHOTO	
16:00			MEAL	MEAL	MEAL	
17:00			OFF DUTY	OFF DUTY	OFF DUTY	

STS-129/ULF3 FD09

GMT	T D R S W E Z	MET Date 11/20 (324)	D O R B / N B	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
		Day 007						
16:00					<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		
							EXERCISE	
						EXERCISE		
14:00								<u>J-ROBO: 1.101 JEMRMS FINAL ACTIVATION</u> [C] Steps 5,6 <u>J-ROBO: 1.173 JEMRMS MNVR TO STOWED POSN AFTER EE LUBE</u>
					EXERCISE			
						<u>TRANSFER TAGUP</u> Coordinate with transfer counterparts		
						<u>TRANSFER BRIEF</u> Call down status to MCC	<u>J-ROBO: 1.109 JEMRMS DEACTIVATION PREP</u>	
15:00								
					CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	
					CREW PHOTO	CREW PHOTO	CREW PHOTO	
16:00								
					MEAL	MEAL	MEAL	
17:00								
					OFF DUTY	OFF DUTY	OFF DUTY	
20:00								

[C] For step 5, a parameter of Reset does not need to be selected and just press Sel button

STS-129/ULF3 FD09

GMT	TDRSZ	MET	ATT	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/20 (324)	W E Z	Day 007					
18:00				OFF DUTY	OFF DUTY	OFF DUTY	
19:00							
19:00					P/TV05 ISS INTERNAL OPS (PHOTO/TV, SCENES) Perform DEACTIVATION		
19:00				FAREWELL	FAREWELL	FAREWELL	
19:00				Z JOINT OPS: 4.102 SHUTTLE/ISS V DUCT REMOVAL & HATCH CLOSING V MCC-H can perform steps 2 & 3 on crew request	P/TV09 GLACIER (PHOTO/TV, SCENES) Perform Video, Photos	NOMINAL H2O CONFIG (ORB OPS, ECLS) FES PRI A Req'd	
20:00				C/L CAMR INSTALL (PHOTO/TV, REF PROC) Perform step 1 only	RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)	CGBA and ABRS STATUS CK (CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD)	
20:00						C/L CAMR INSTALL (PHOTO/TV, REF PROC) Perform step 1 only	
21:00				PCS ACTIVATION <input type="checkbox"/> D			
21:00				<input type="checkbox"/> D PCS ACTIVATION MO10W 14.7 CAB REG INLET SYS-1 VLV - OP Avoid WCS use during high N2 flow. Expect possible 'S66 CAB N2(02) FLO 1' msgs		EXERCISE	
21:00					EXERCISE		
00:00							

STS-129/ULF3 FD09

GMT	T D R S E Z	MET	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	MS5 STOTT	NOTES
Date 11/20 (324)	W E Z	Day 007					
18:00		20:00	OFF DUTY	OFF DUTY	OFF DUTY		
		21:00					
		19:00					
19:00		22:00	FAREWELL	FAREWELL	FAREWELL	FAREWELL	
		20:00					
20:00		23:00					
		21:00					
21:00		00:00					

PODF: 2.014 ULF-3 DOUBLE COLDBAG PACK

P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) Setup

Z JOINT OPS: 4.102 SHUTTLE/ISS DUCT REMOVAL & HATCH CLOSING
V MCC-H can perform steps 2 & 3 on crew request

P/TV03 UNDOCK (PHOTO/TV, SCENES) Setup

NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS G-H (Vaccine 6) Steps 2,6,11

NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS 9-16 (Cells 2)

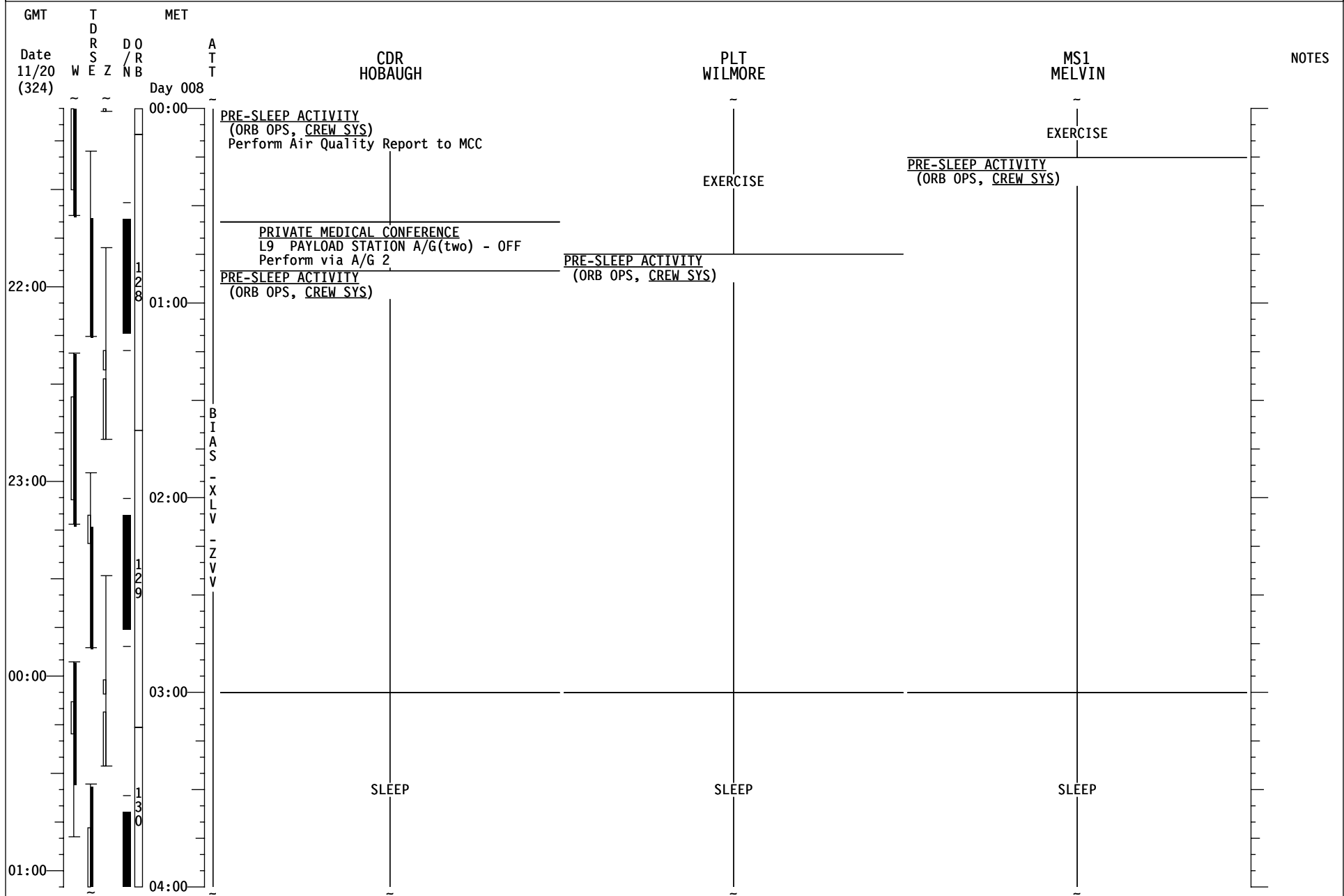
JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK

JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK

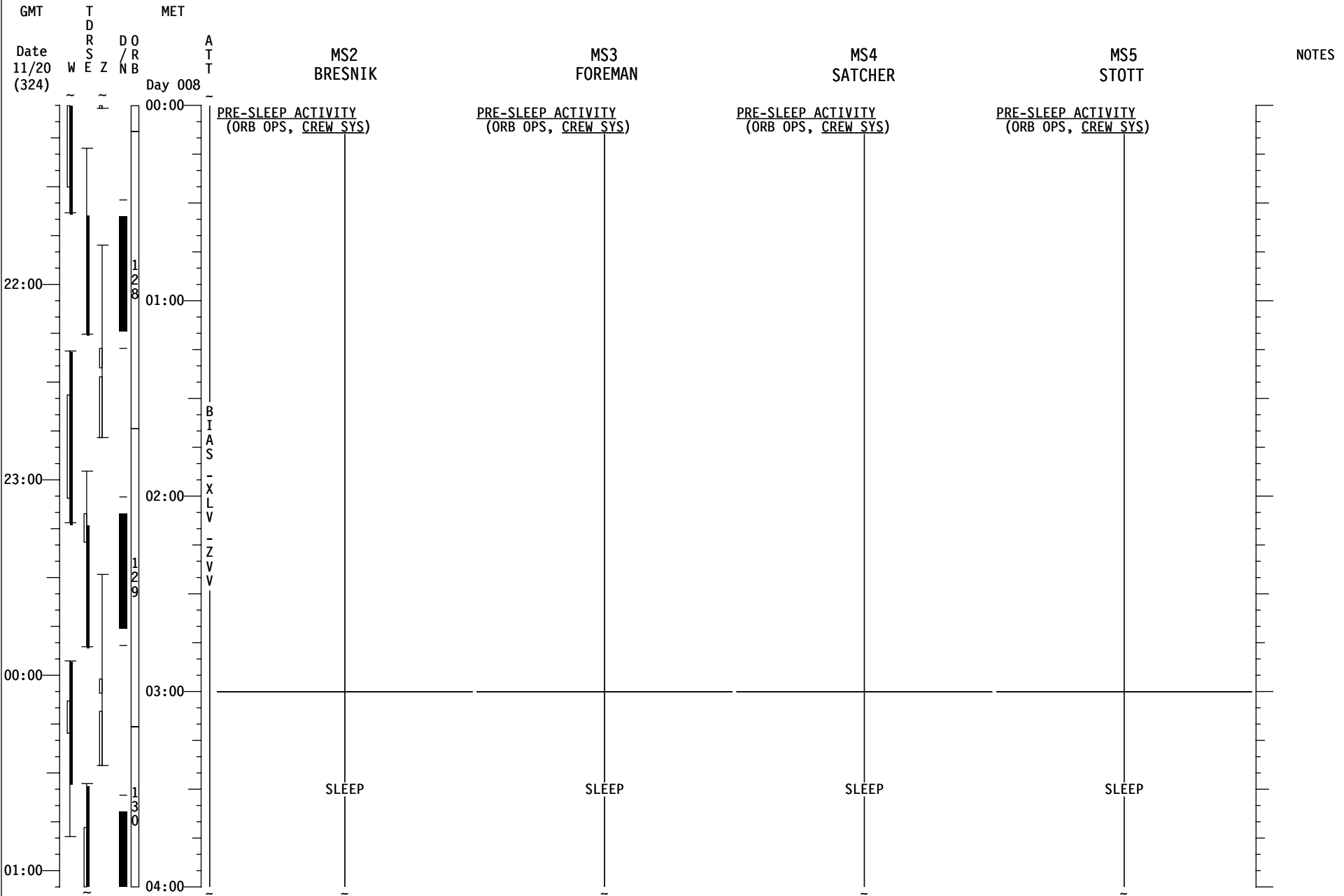
RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)

ARED

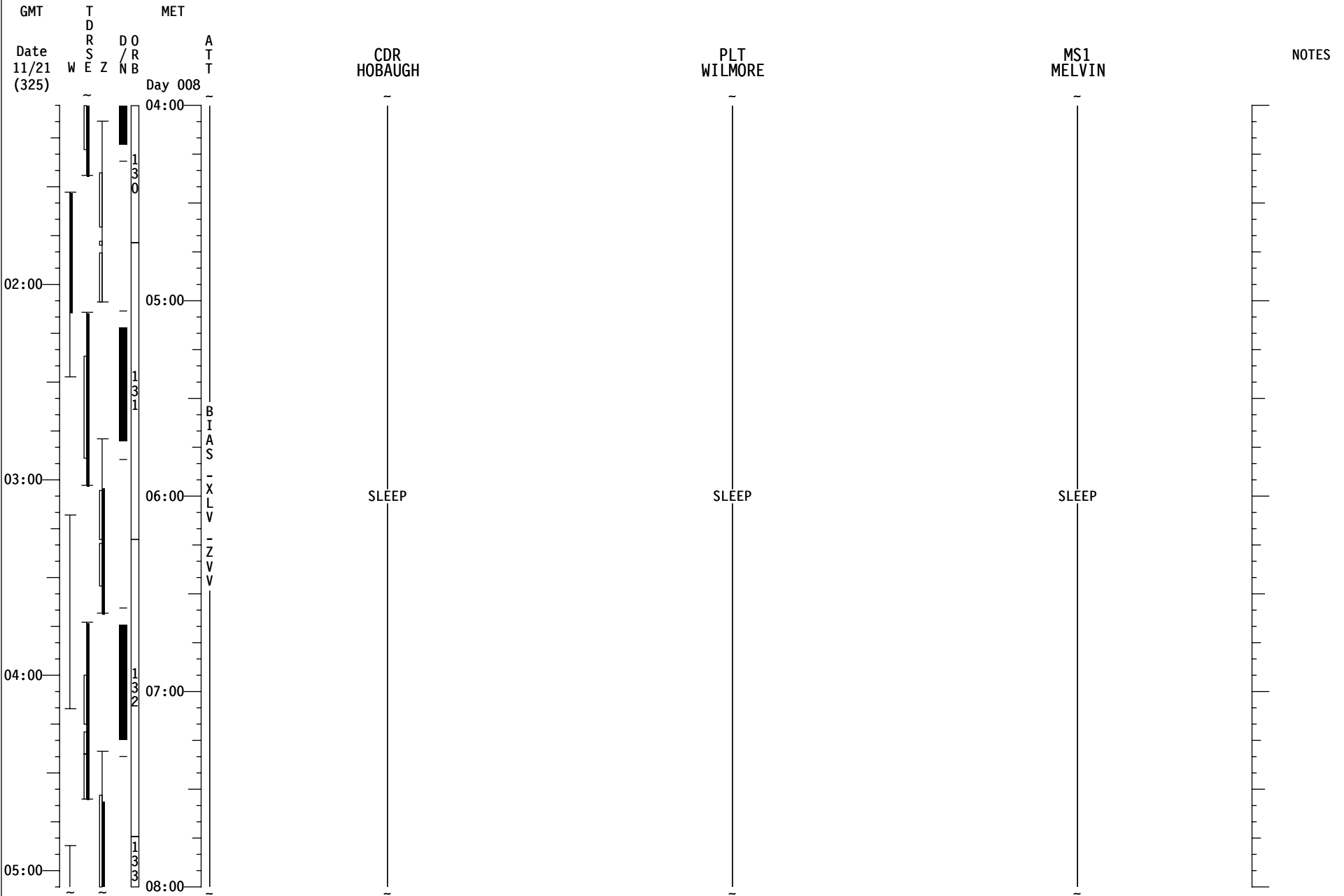
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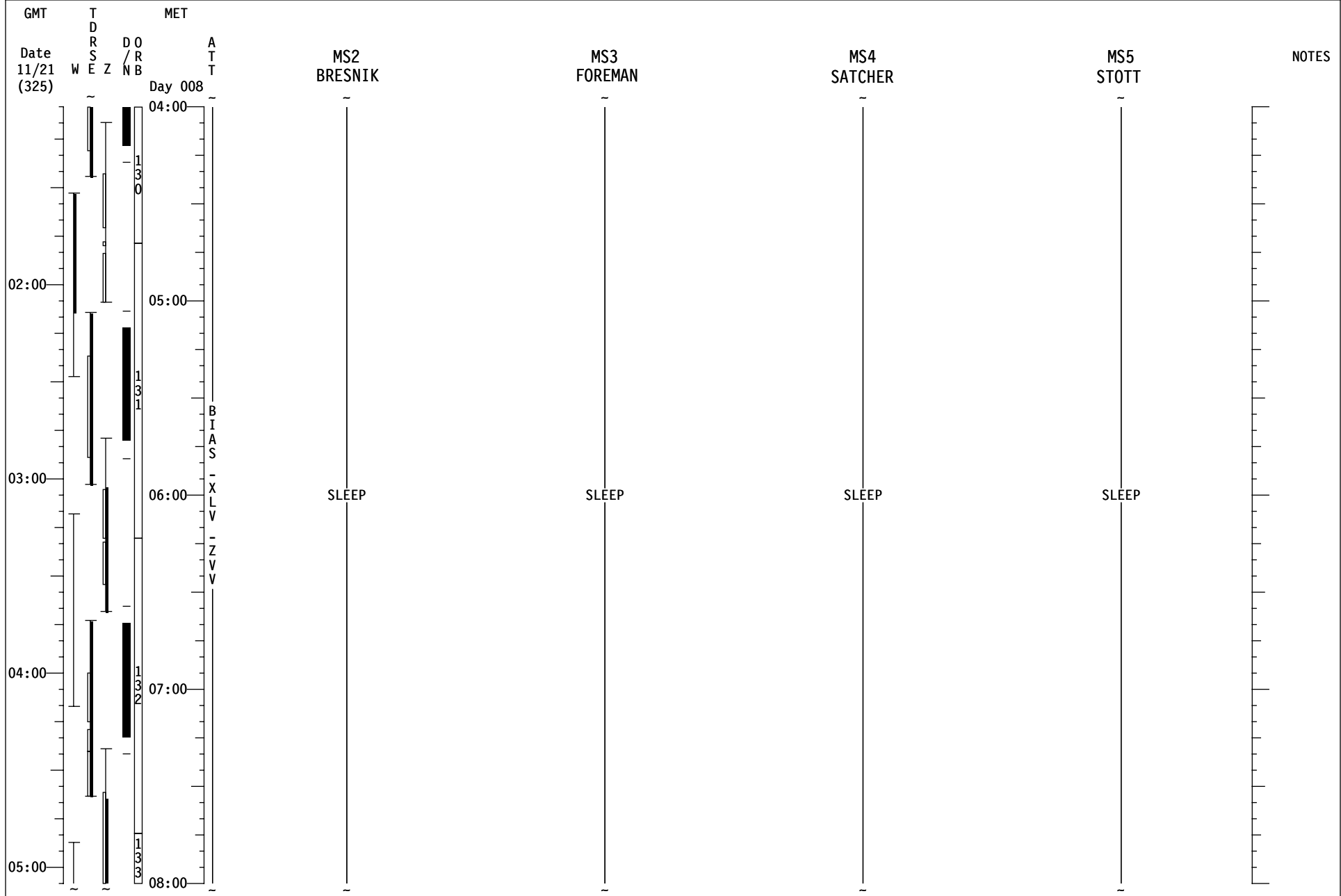
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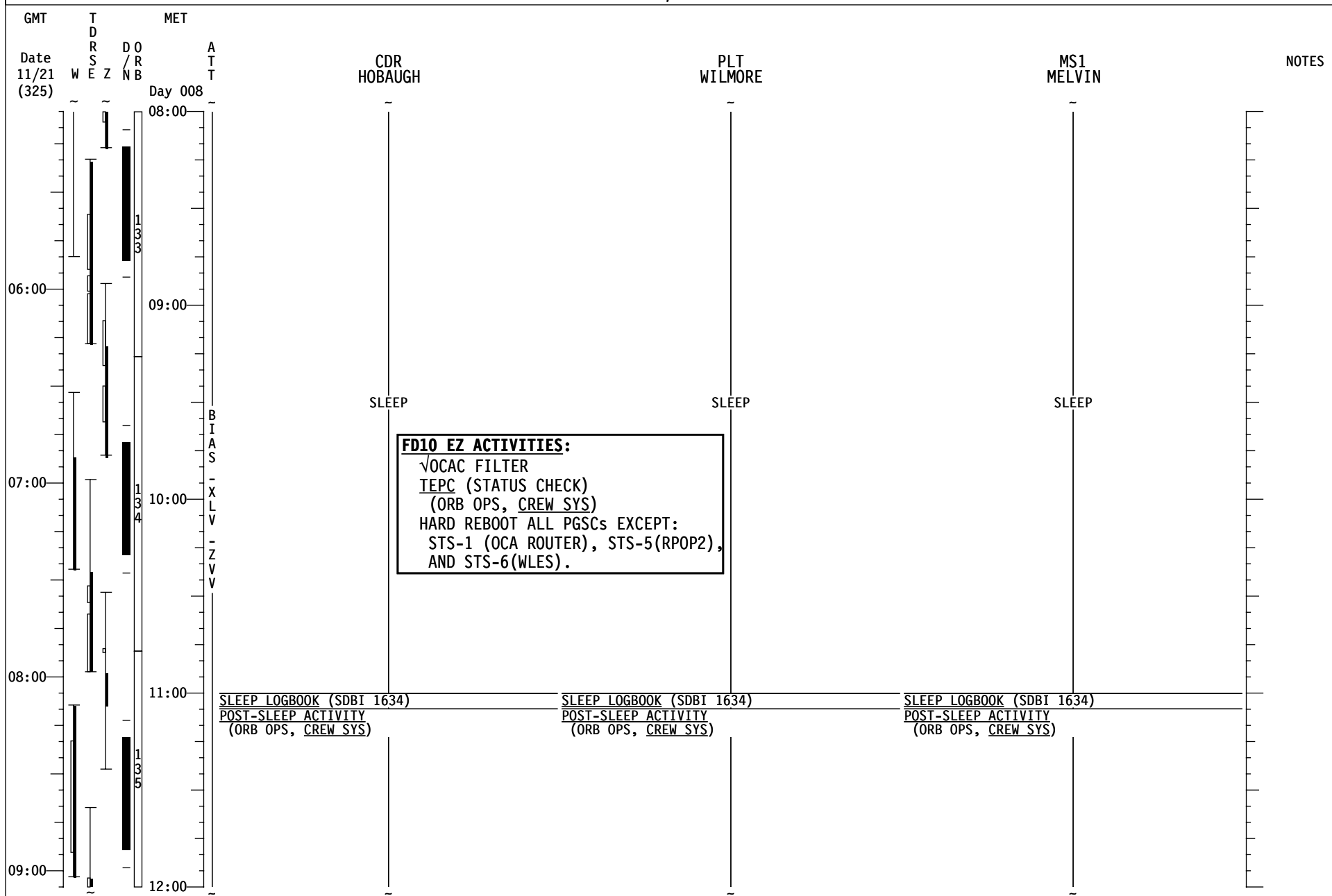
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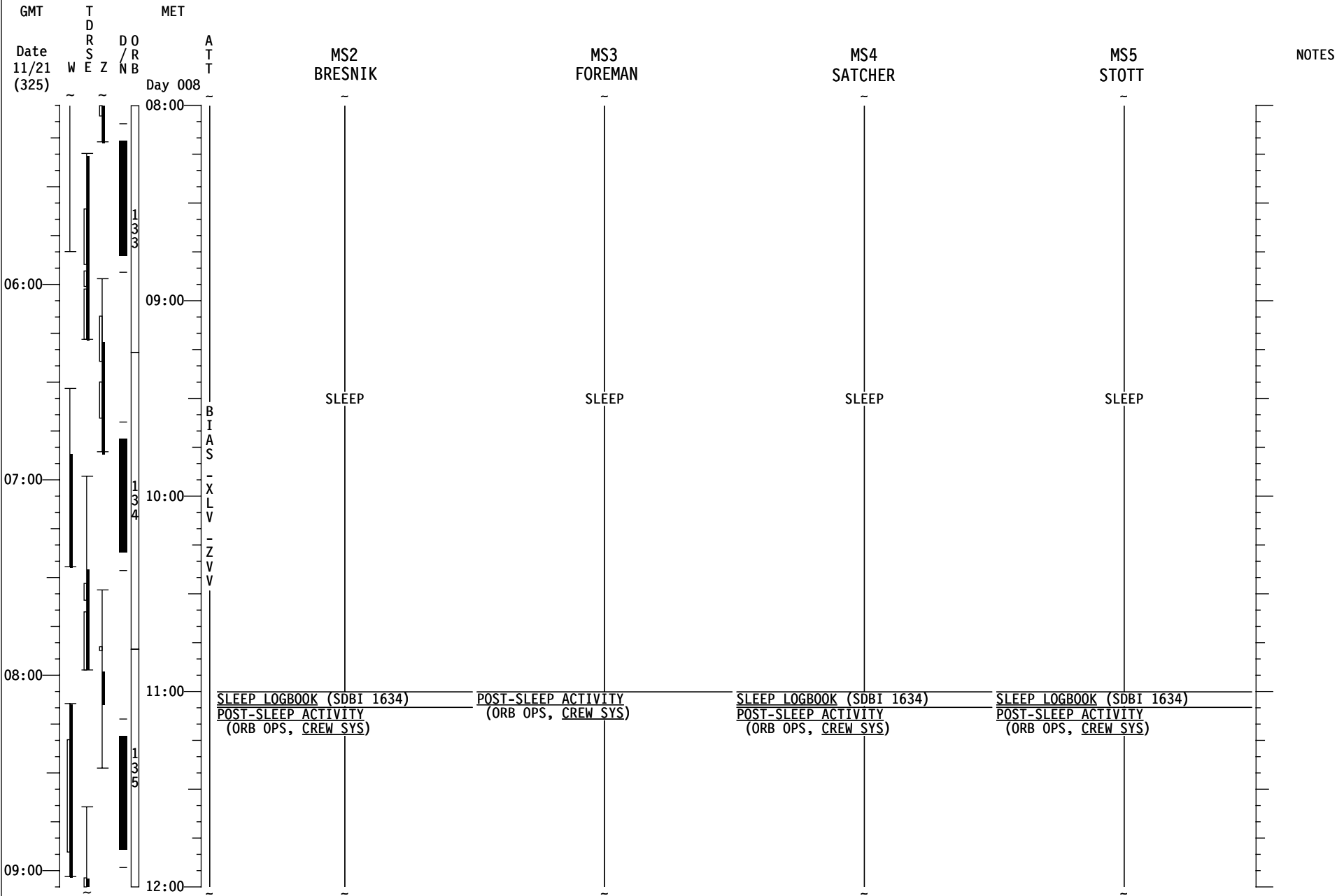
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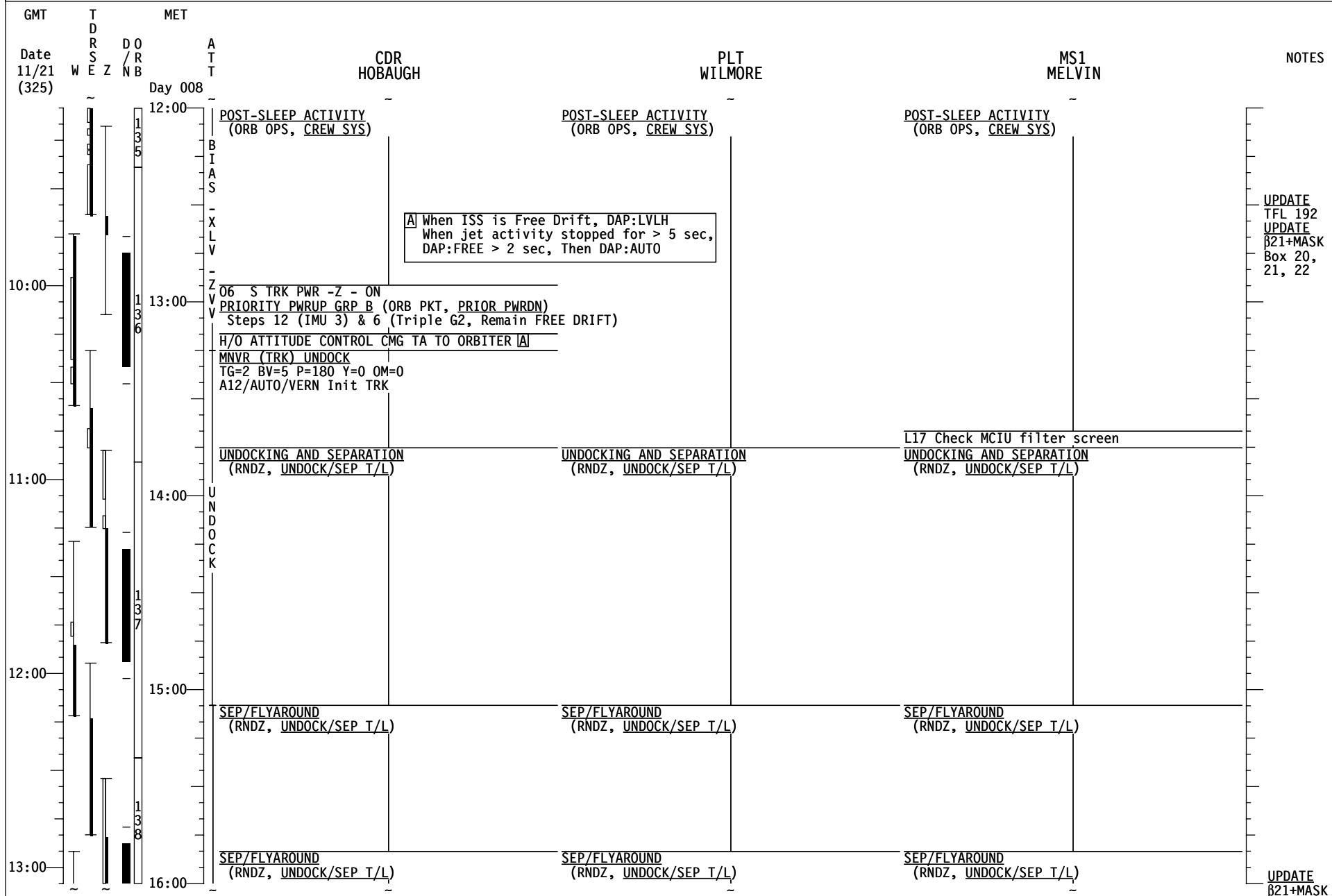
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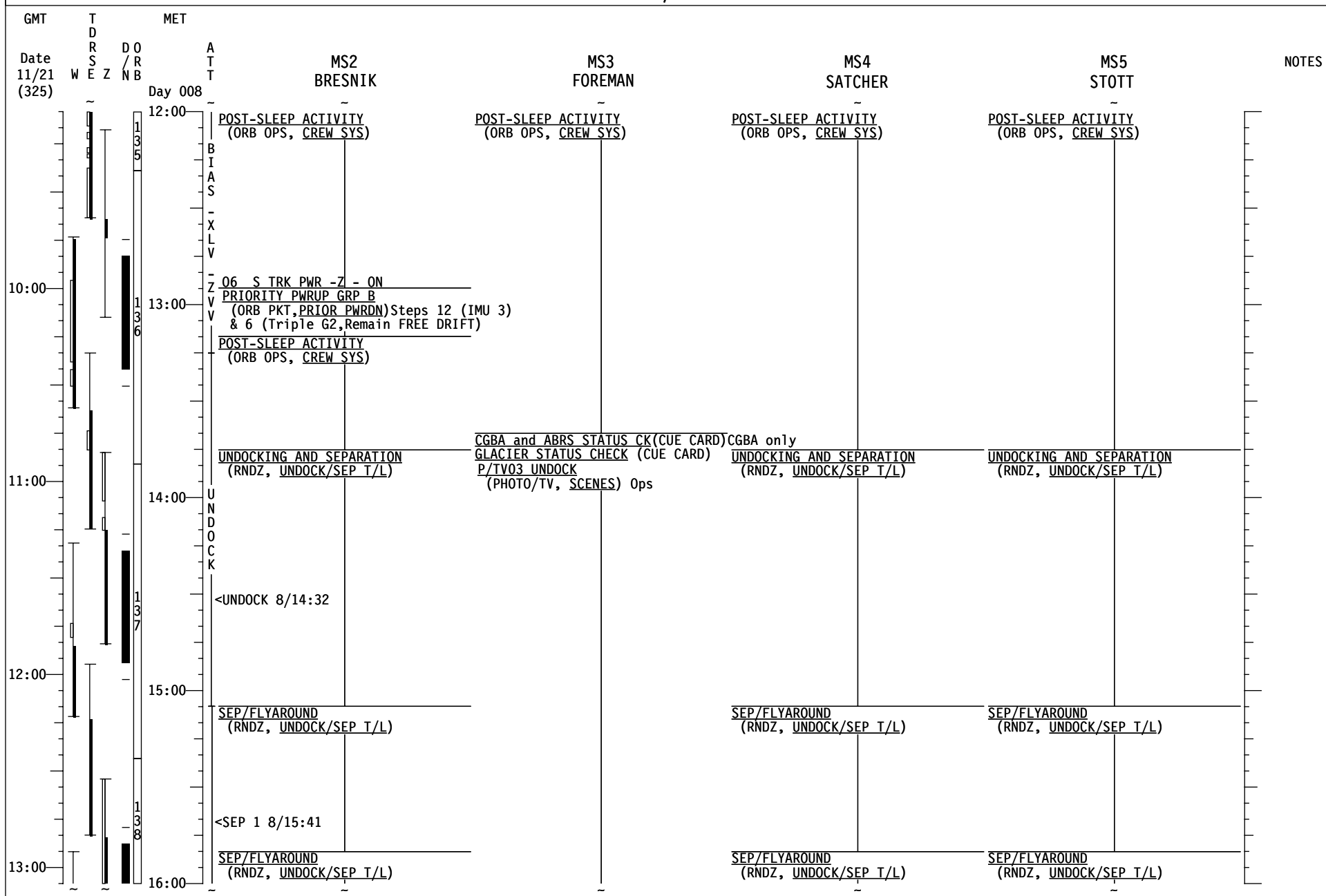
STS-129/ULF3 FD10



STS-129/ULF3 FD10



STS-129/ULF3 FD10



STS-129/ULF3 FD10

GMT	T D R S E Z	MET	A T T	CDR HOBGAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/21 (325)	W E Z	Day 008					
16:00				SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
				<-SEP 2 8/16:15			
				MNVR (TRK) -ZLV +YVV (DUMP) TG=2 BV=3 OM=270 A1/AUTO/VERN Init TRK	HTR RECONFIG - CONFIG B (ORB OPS, EPS) SSP1 OIU PWR - OFF (v/b-bp) Expect BCE BYP PSP 1	COMM STRING 1 C/O (PART A) (ORB OPS, COMM/INST)	UPDATE TFL 188
				SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Initiate Waste Dump	SSV OUNRATE -4 PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12 (In Step 12,IMU3-STBY)	JOINT OPS: 6.106 SSOR DEACTIVATION	UPDATE H2O WASTE DUMP QTY
14:00							
				MEAL	MEAL	MEAL	
15:00				SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Waste Dump	R1 PL PRI MNC - ON (tb-ON) OBSS UNBERTH (PDRS, OBSS OPS)	R1 PL PRI MNC - ON (tb-ON) OBSS UNBERTH (PDRS, OBSS OPS)	
				IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)			
				SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform TEARDOWN Ref. MSG XXX			
16:00							
				MNVR (TRK) BIAS +YSI (STBD SURVEY) TG=4 BV=5 P=0 Y=40 OM=270 A14/AUTO/VERN OBSS UNBERTH cmlpt, Init TRK	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	
				EXERCISE			
17:00							
20:00							

STS-129/ULF3 FD10

GMT	TDRS W E Z	MET D O R / R N B Day 008	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	MS5 STOTT	NOTES
16:00				SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	P/TV03 UNDOCK (PHOTO/TV, SCENES) Ops	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
				CABIN TEMP CONTROLLER RECONFIG 2(1) (ORB OPS, ECLS)	P/TV03 UNDOCK (PHOTO/TV, SCENES) Deactivation	POST UNDOCK PGSC CONFIG Configure PGSCs per usage chart		
				PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12 (In Step 12,IMU 3-STBY)	DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) KU TDRW 18:00-18:32			
14:00								
				MEAL	MEAL	MEAL	MEAL	
15:00					EVA UNPACK & STOW (EVA, AIRLOCK CONFIG)	EVA UNPACK & STOW (EVA, AIRLOCK CONFIG)		
16:00				OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)				
					POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)	POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)		
17:00								
20:00								

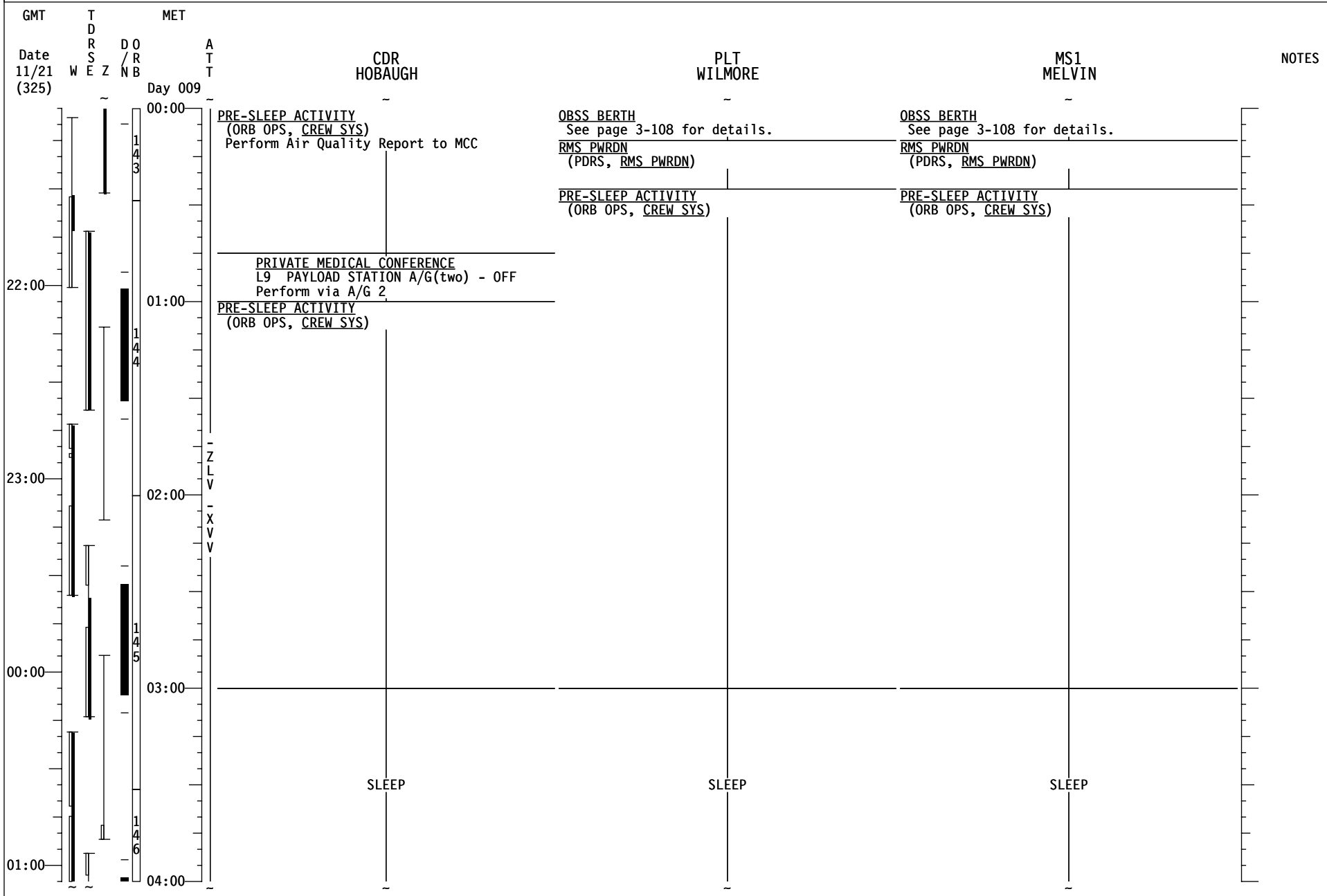
STS-129/ULF3 FD10

GMT	TDRS W E Z	MET Day 008	ATT A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
18:00			BIAS	EXERCISE	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	
			+XSI	<u>MNVR (TRK) BIAS +XSI (NOSE CAP)</u> TG=4 BV=5 P=330 Y=0 OM=330 A14/AUTO/VERN RCC SURVEY-STBD cmlt, Init TRK	<u>OBSS LDRI/IDC RCC SURVEY - NOSE CAP</u> (PDRS, OBSS OPS)	<u>OBSS LDRI/IDC RCC SURVEY - NOSE CAP</u> (PDRS, OBSS OPS)	
19:00			BIAS		<u>OBSS LDRI/IDC RCC SURVEY - PORT</u> (PDRS, OBSS OPS)	<u>OBSS LDRI/IDC RCC SURVEY - PORT</u> (PDRS, OBSS OPS)	
			-YSI	<u>MNVR (TRK) BIAS -YSI (PORT SURVEY)</u> TG=4 BV=5 P=0 Y=323 OM=165 A14/AUTO/VERN, RCC SURVEY-PORT Step 3 cmlt, Init TRK			
20:00			L		<u>OBSS BERTH (PDRS, OBSS OPS)</u> When OBSS BERTH complete; R1 PL PRI MNC - OFF (tb-OFF) Note: Expect 'S200 APCU 1(2) TRIP' msgs	<u>OBSS BERTH (PDRS, OBSS OPS)</u> When OBSS BERTH complete; R1 PL PRI MNC - OFF (tb-OFF) Note: Expect 'S200 APCU 1(2) TRIP' msgs	
			X	<u>MNVR (TRK) -ZLV -XVV</u> TG=2 BV=3 OM=0 A14/AUTO/VERN, RCC SURVEY-PORT Step 12 cmlt, Init TRK			
21:00			V	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC			

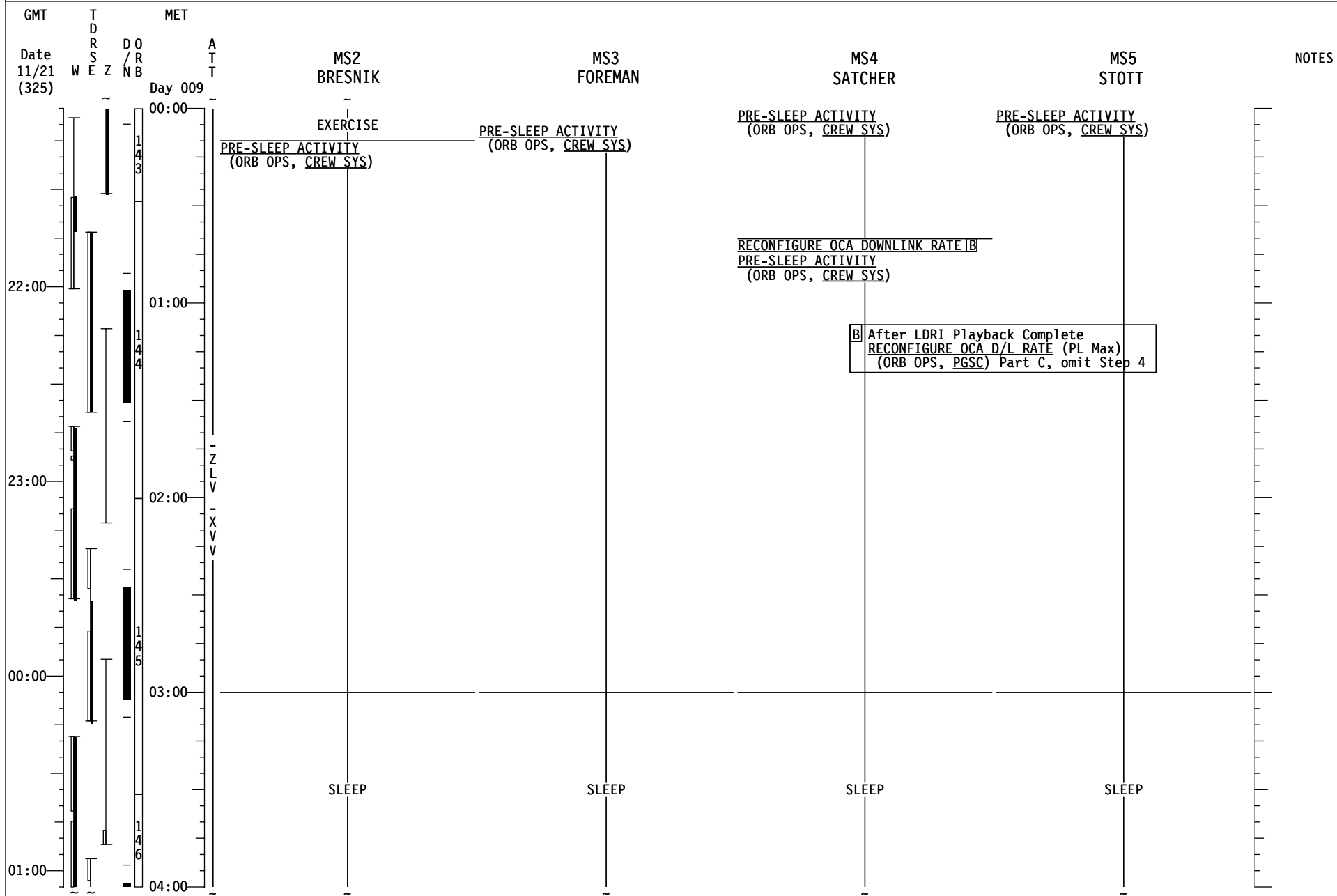
STS-129/ULF3 FD10

GMT	TDRS W E Z	MET D O R / R N B	A T T Day 008	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	MS5 STOTT	NOTES
18:00			141	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)	POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)		
				OBSS LDRI/IDC RCC SURVEY - NOSE CAP (PDRS, OBSS OPS)			EXERCISE	
19:00			142	OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPS)		EXERCISE		
20:00					EXERCISE			
21:00			143	EXERCISE		DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) LDRI SURVEYS KU TDRE 22:24-23:19		
21:00							MDS STATUS CHECK (ASSY OPS, PAYLOADS)	
00:00					CGBA & ABRIS STS CK (CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD)			

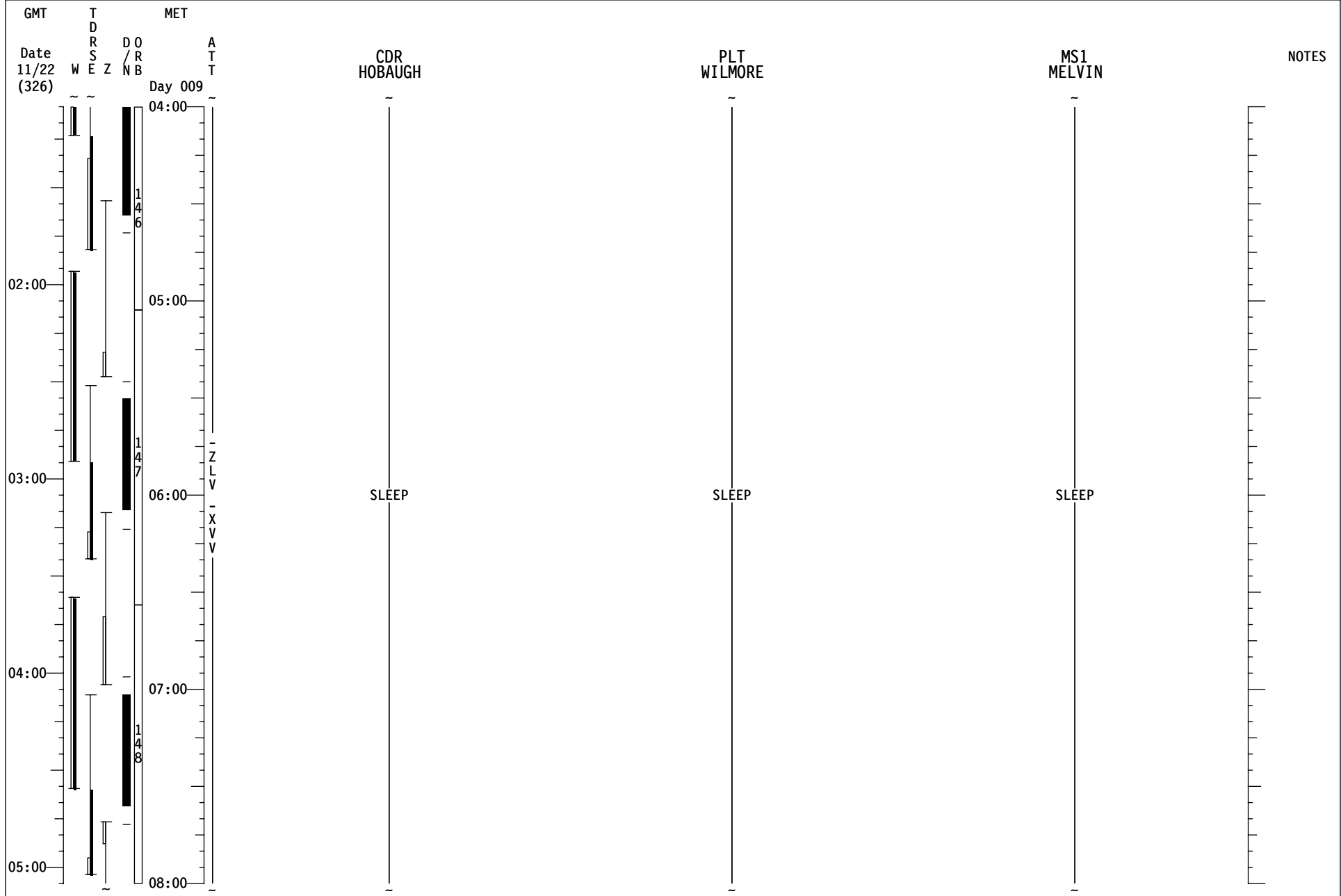
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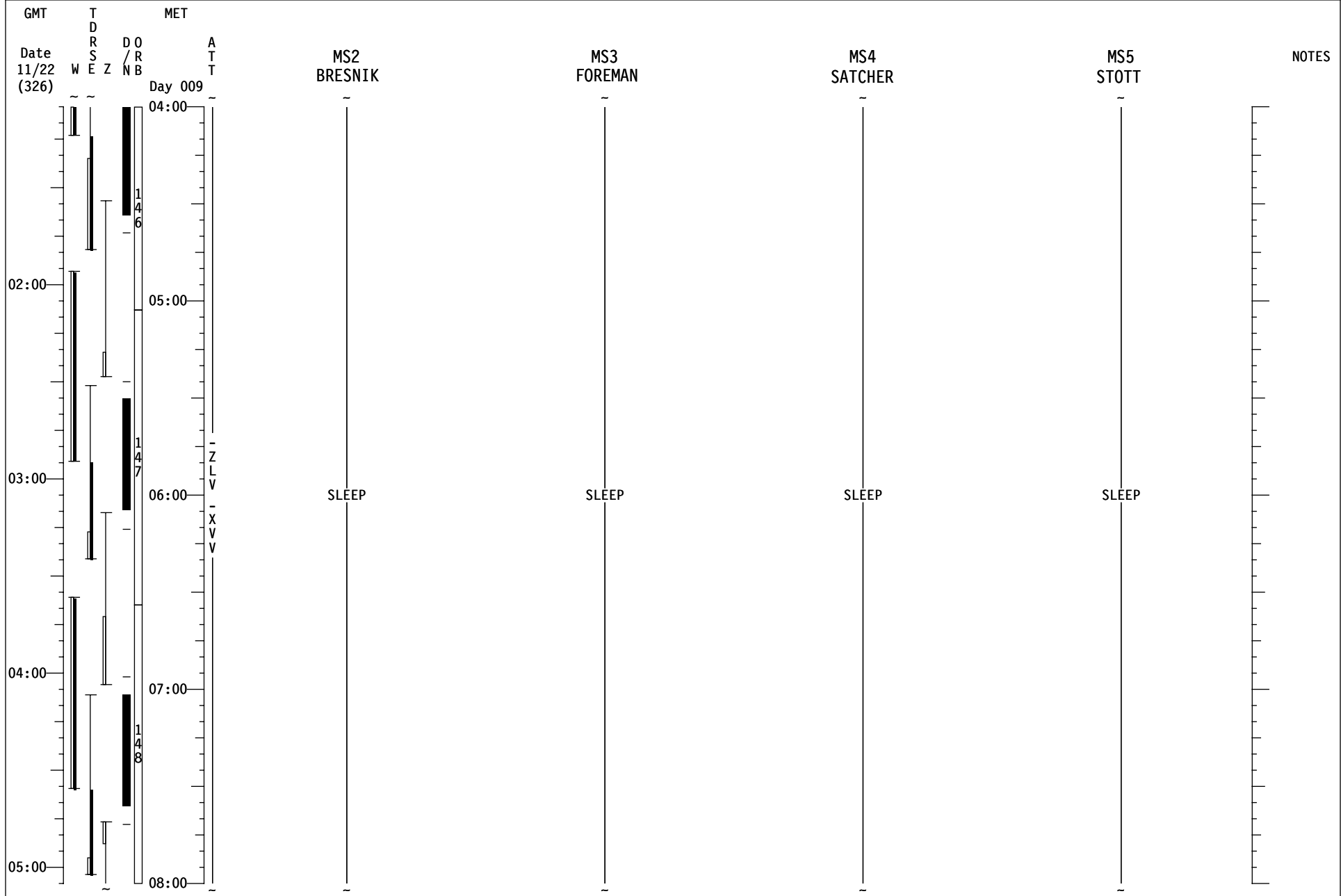
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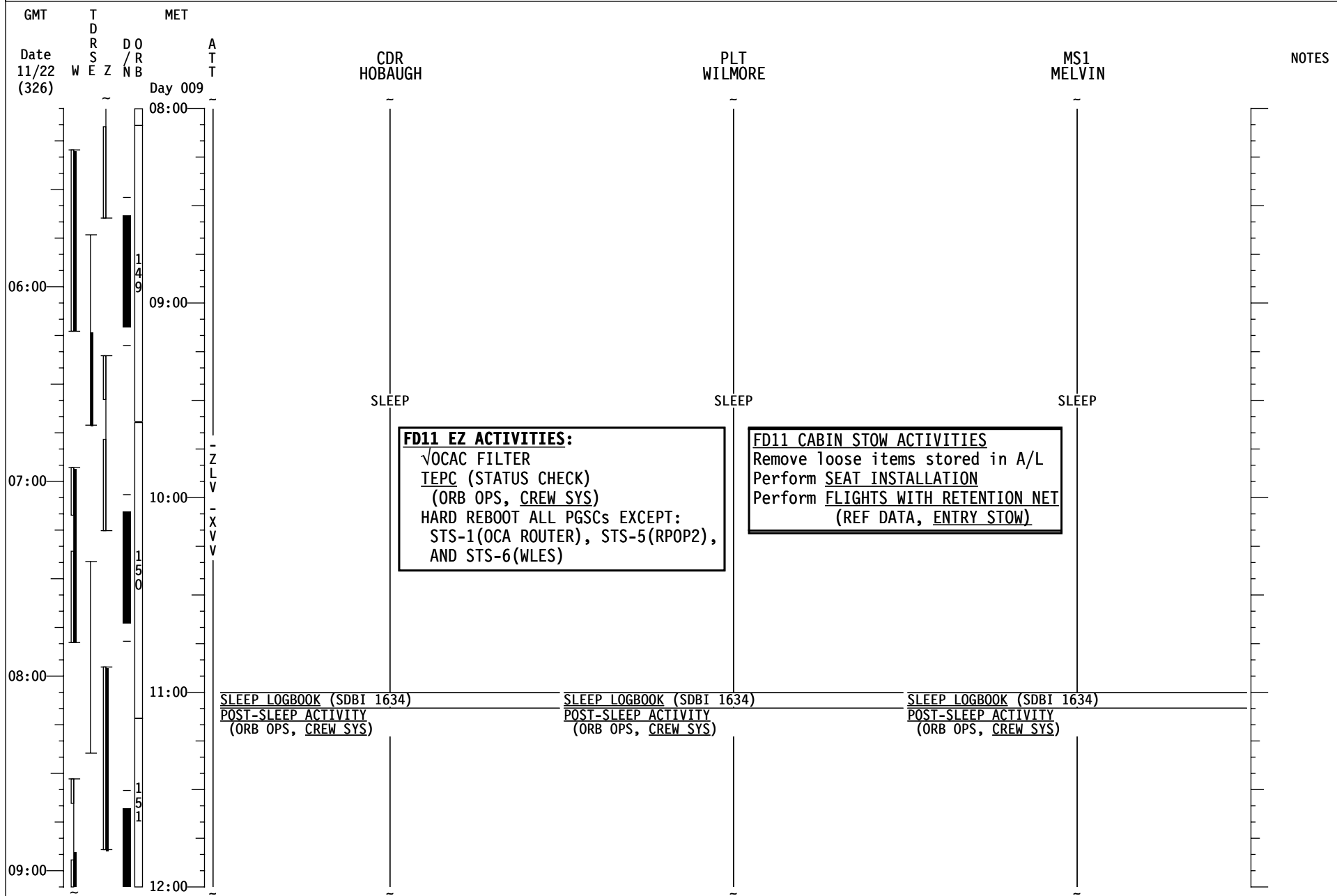
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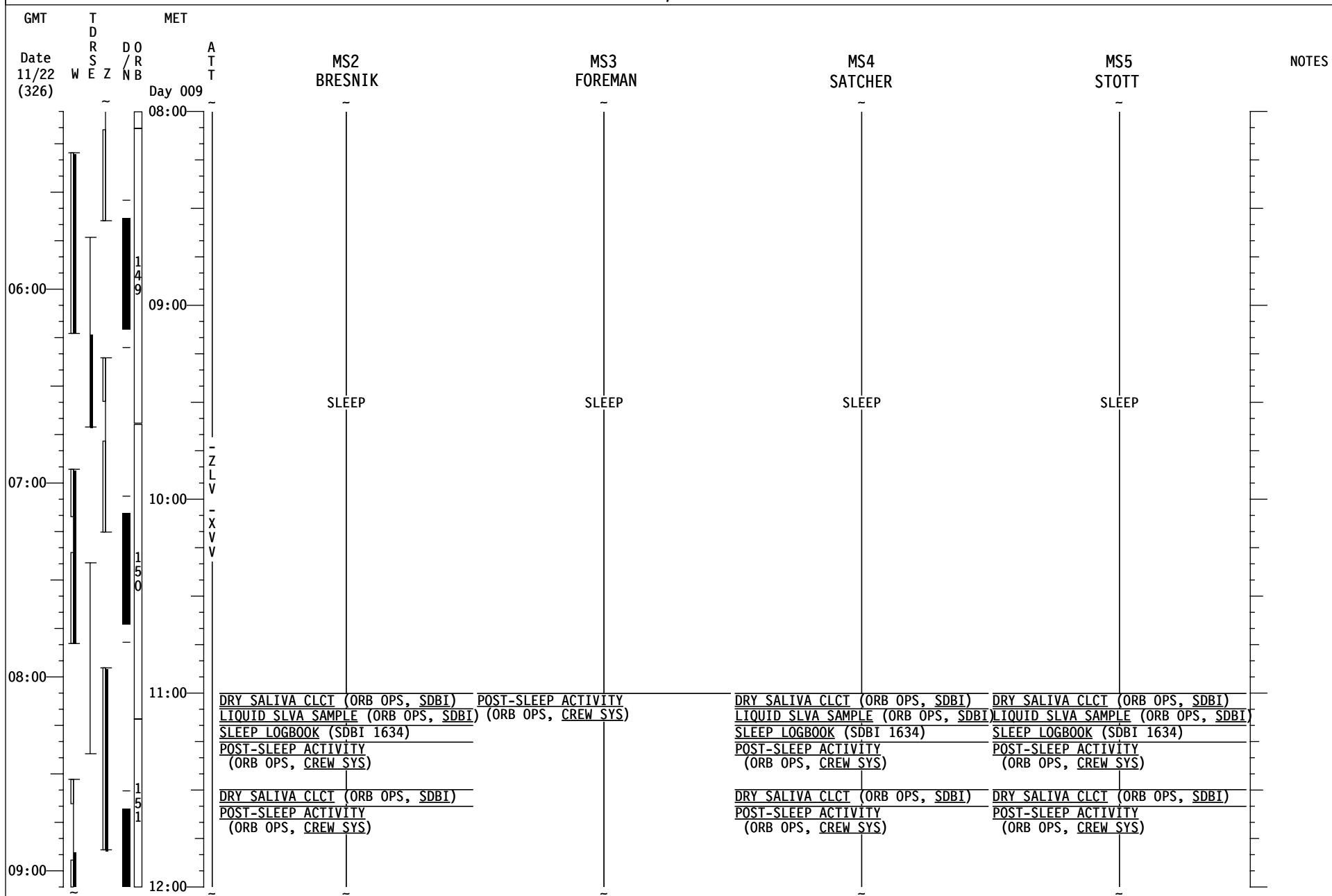
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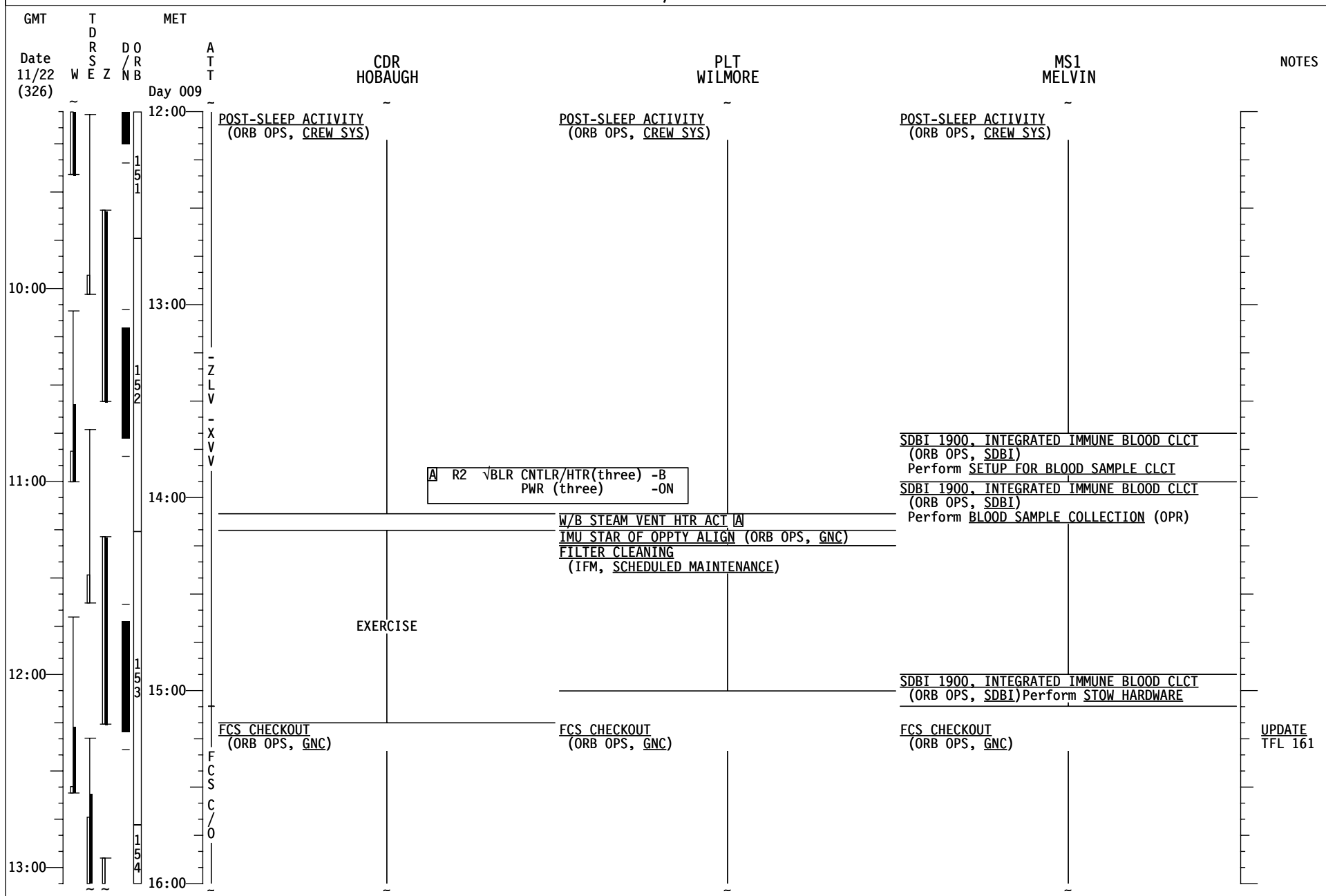
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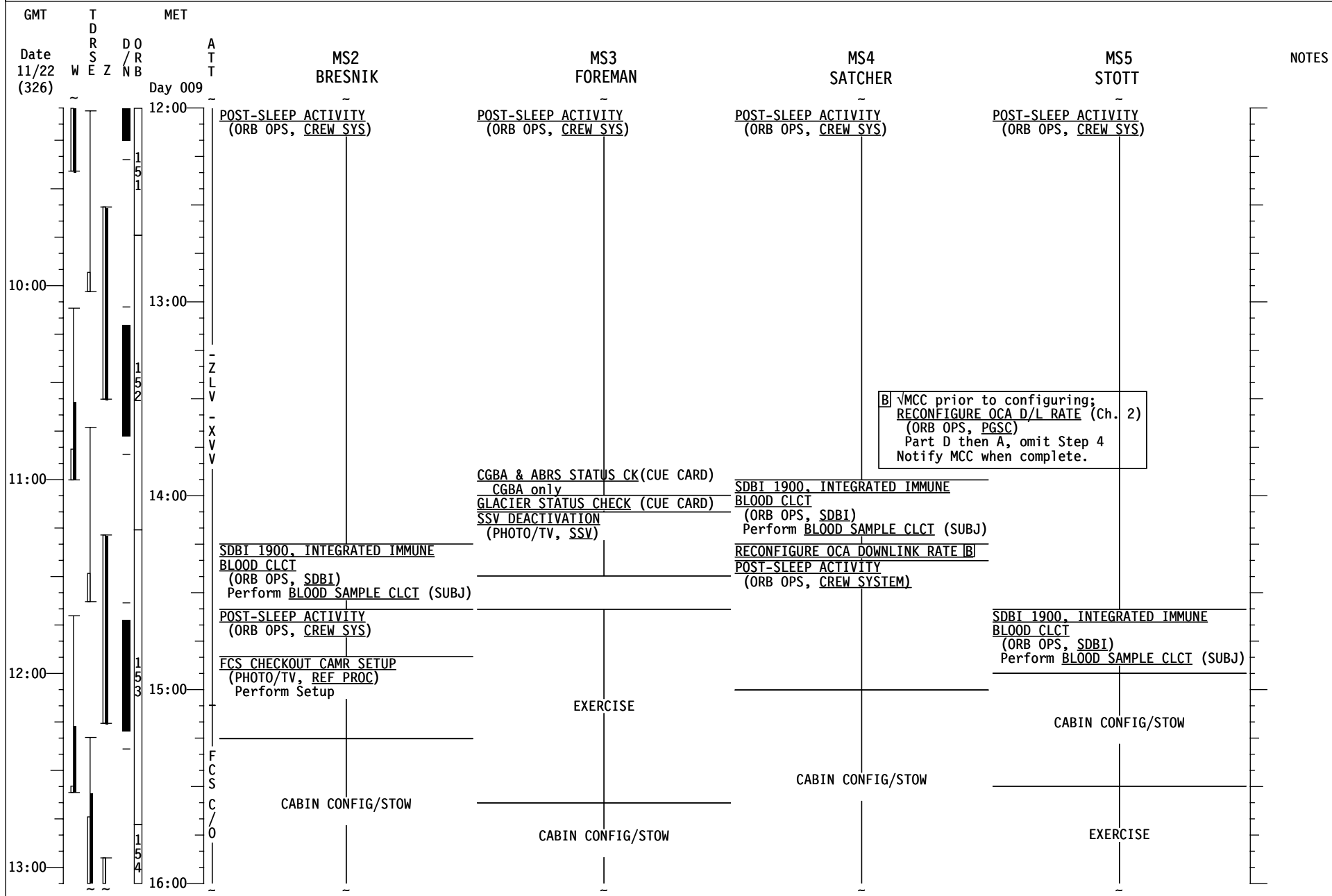
STS-129/ULF3 FD11



STS-129/ULF3 FD11



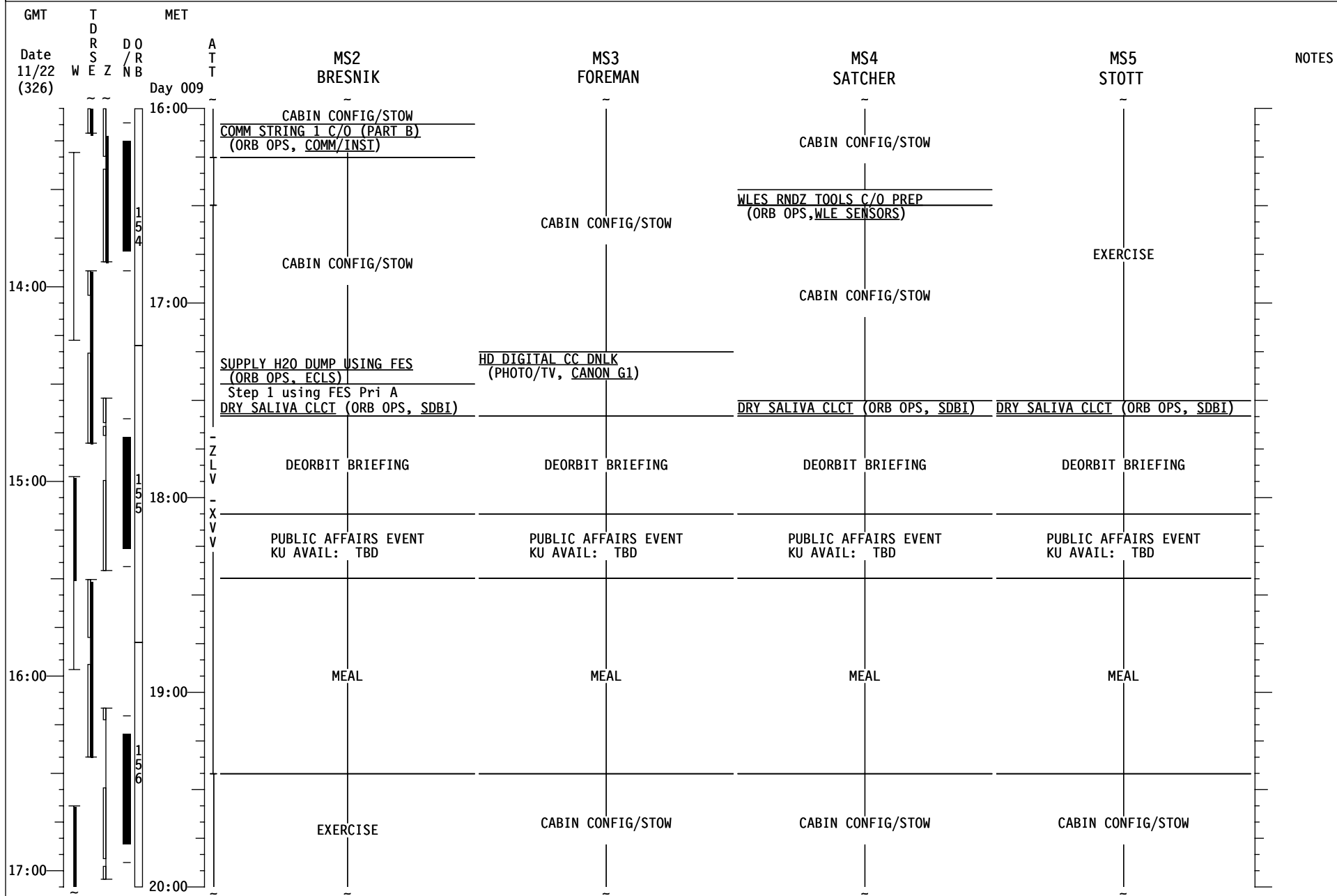
STS-129/ULF3 FD11



STS-129/ULF3 FD11

GMT	TDRS W E Z	MET Day 009	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00				<u>FCS CHECKOUT</u> (ORB OPS, <u>GNC</u>)	<u>FCS CHECKOUT</u> (ORB OPS, <u>GNC</u>)	<u>FCS CHECKOUT</u> (ORB OPS, <u>GNC</u>)	<u>UPDATE</u> TFL 161
				<u>RCS HOT FIRE TEST</u> (ORB OPS, <u>RCS</u>) In Step 6, DAP: A1/AUTO/VERN	<u>RCS HOT FIRE TEST</u> (ORB OPS, <u>RCS</u>) In Step 6, DAP: A1/AUTO/VERN	<u>RCS HOT FIRE TEST</u> (ORB OPS, <u>RCS</u>) In Step 6, DAP: A1/AUTO/VERN	
				<u>PILOT WITH RHC</u> (ORB OPS, <u>PGSC</u>)	<u>PILOT WITH RHC</u> (ORB OPS, <u>PGSC</u>)	<u>PILOT WITH RHC</u> (ORB OPS, <u>PGSC</u>)	
17:00							
18:00				DEORBIT BRIEFING	DEORBIT BRIEFING	DEORBIT BRIEFING	
				PUBLIC AFFAIRS EVENT KU AVAIL: TBD	PUBLIC AFFAIRS EVENT KU AVAIL: TBD	PUBLIC AFFAIRS EVENT KU AVAIL: TBD	
19:00				MEAL	MEAL	MEAL	
				<u>MNVR (TRK) BIAS -ZLV -YVV (DUMP)</u> TG=2 BV=3 OM=70 A1/AUTO/VERN Init TRK	<u>ENTRY VIDEO SETUP</u> (PHOTO/TV, <u>REF PROC</u>)		
				<u>SUPPLY/WASTE WATER DUMP</u> (ORB OPS, <u>ECLS</u>) Initiate Supply/Waste Dump	CABIN CONFIG/STOW	CABIN CONFIG/STOW	
20:00							

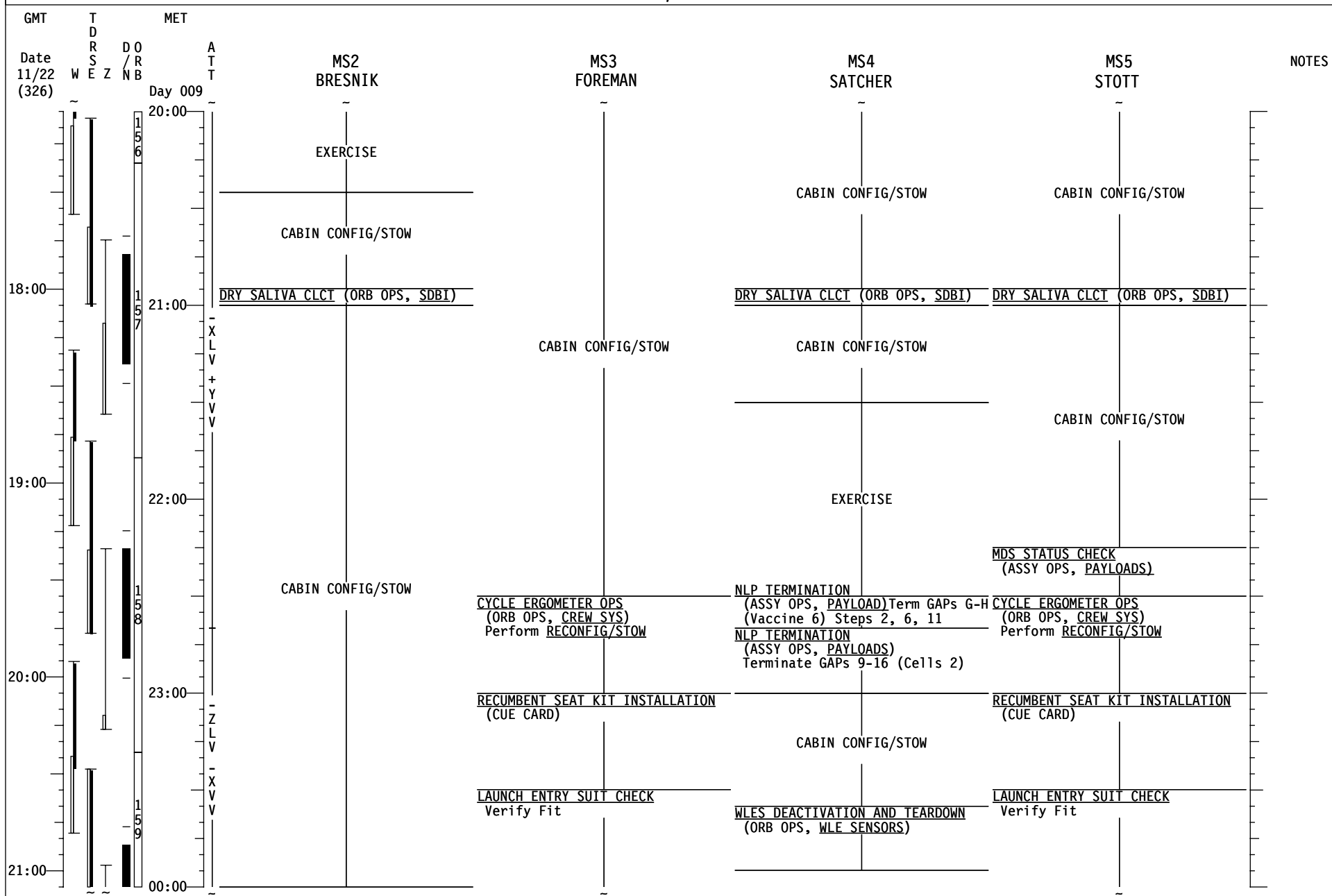
STS-129/ULF3 FD11



STS-129/ULF3 FD11

GMT	TDRS W E Z	MET Day 009	ATT	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
20:00				CABIN CONFIG/STOW	CABIN CONFIG/STOW	CABIN CONFIG/STOW	
				CABIN CONFIG/STOW			LANDING-1 COMM C/O (ORB OPS, COMM/INST) MLA AOS 20:23 - 20:31
18:00					EXERCISE		
				SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Supply/Waste Dump			
				+ CWC OVERBOARD DUMP (ORB OPS, ECLS) Initiate Condensate Dump		EXERCISE	
19:00				CABIN CONFIG/STOW			
							LANDING-1 COMM C/O (ORB OPS, COMM/INST) DFR AOS 21:54 - 22:01
				CWC OVERBOARD DUMP (ORB OPS, ECLS) Perform DUMP TERMINATION			
				MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK	CABIN CONFIG/STOW		
20:00				CABIN CONFIG/STOW		CABIN CONFIG/STOW	
				C R12 VPU PWR - OFF(LED-off) Minimize use of P/TV equipment Dim cabin lighting to 25%			
21:00				A6L MADS STRAIN GAGE - ON			
				ENTRY COOLING CONFIG [C]			
				SUPPLY WATER DUMP USING FES (ORB OPS, ECLS) On MCC GO: Step 2, FES Pri A Req'd			CGBA and ABR STATUS CK(CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD)
00:00							

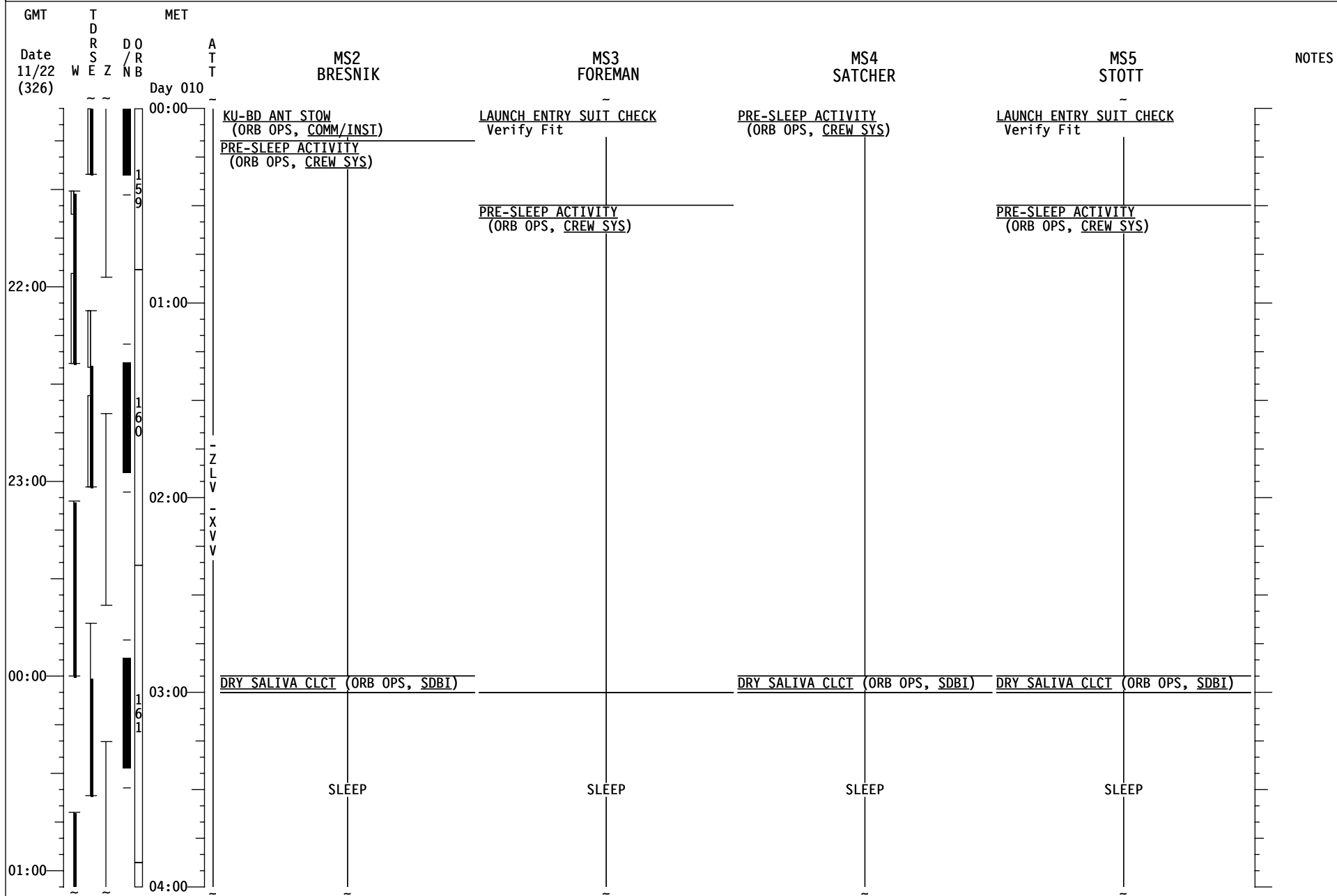
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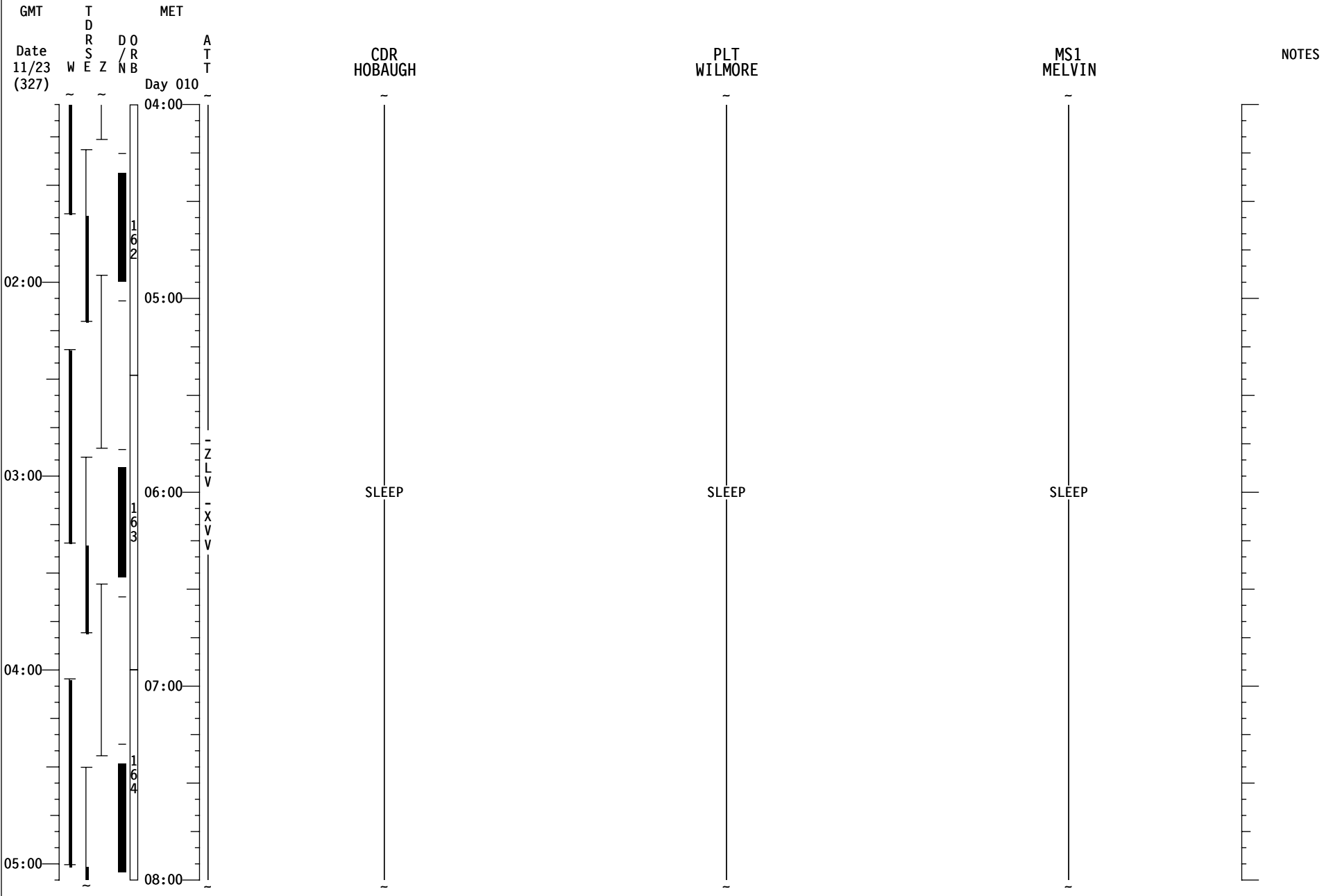
STS-129/ULF3 FD11

GMT	T D R S E Z	MET	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/22 (326)	W E Z	DO R NB Day 010				
00:00			PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	KU-BD ANT STOW (ORB OPS, COMM/INST)	
			PRIVATE MEDICAL CONFERENCE Perform via A/G 2		PGSC NETWORK (B. TEARDOWN) COLOR PRINTER STOW (ORB OPS, PGSC) Stow color printer and all STS PGSCs except STS2 (WINDECOM)	
22:00			PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
23:00						
00:00						
01:00			SLEEP	SLEEP	SLEEP	
04:00						

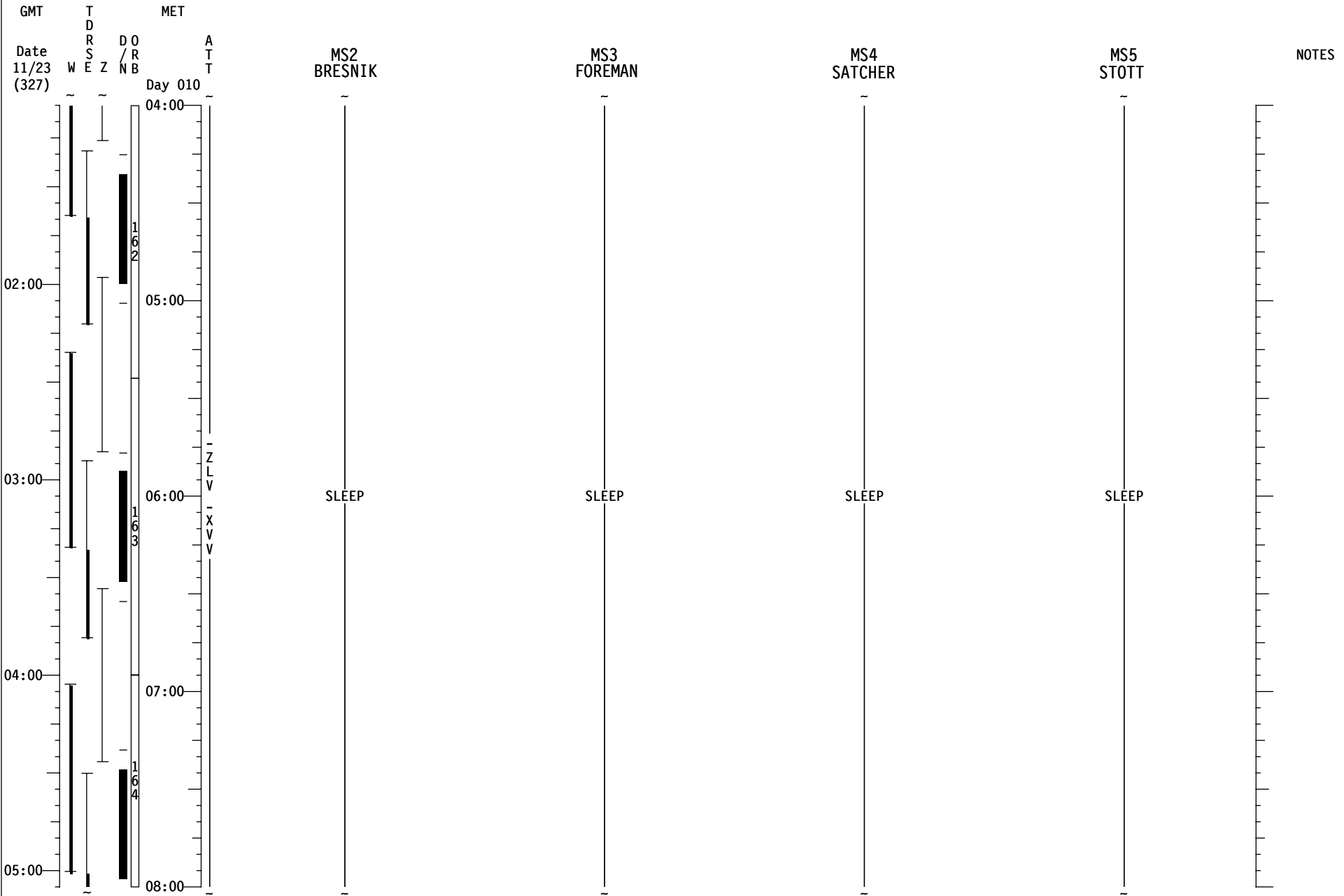
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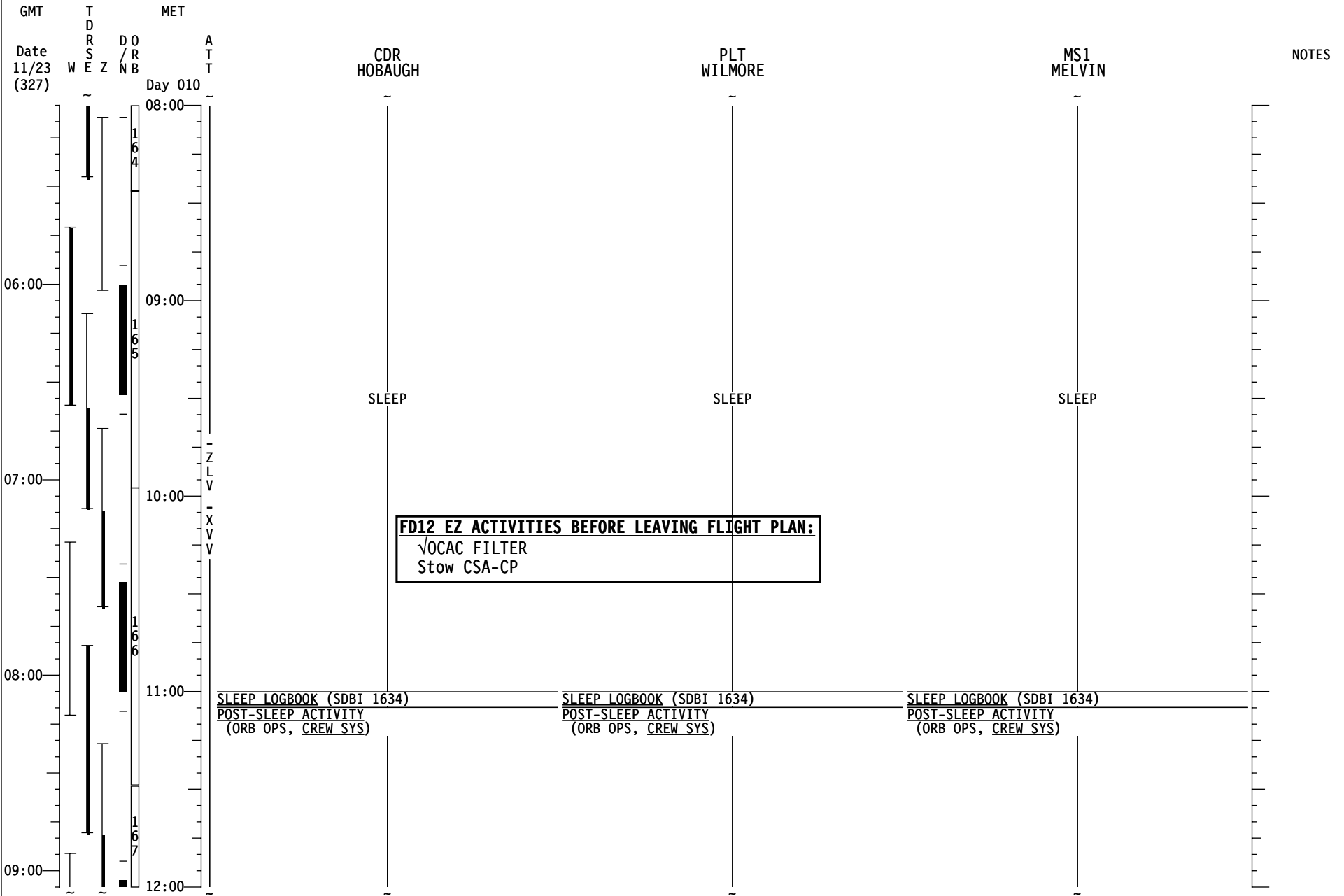
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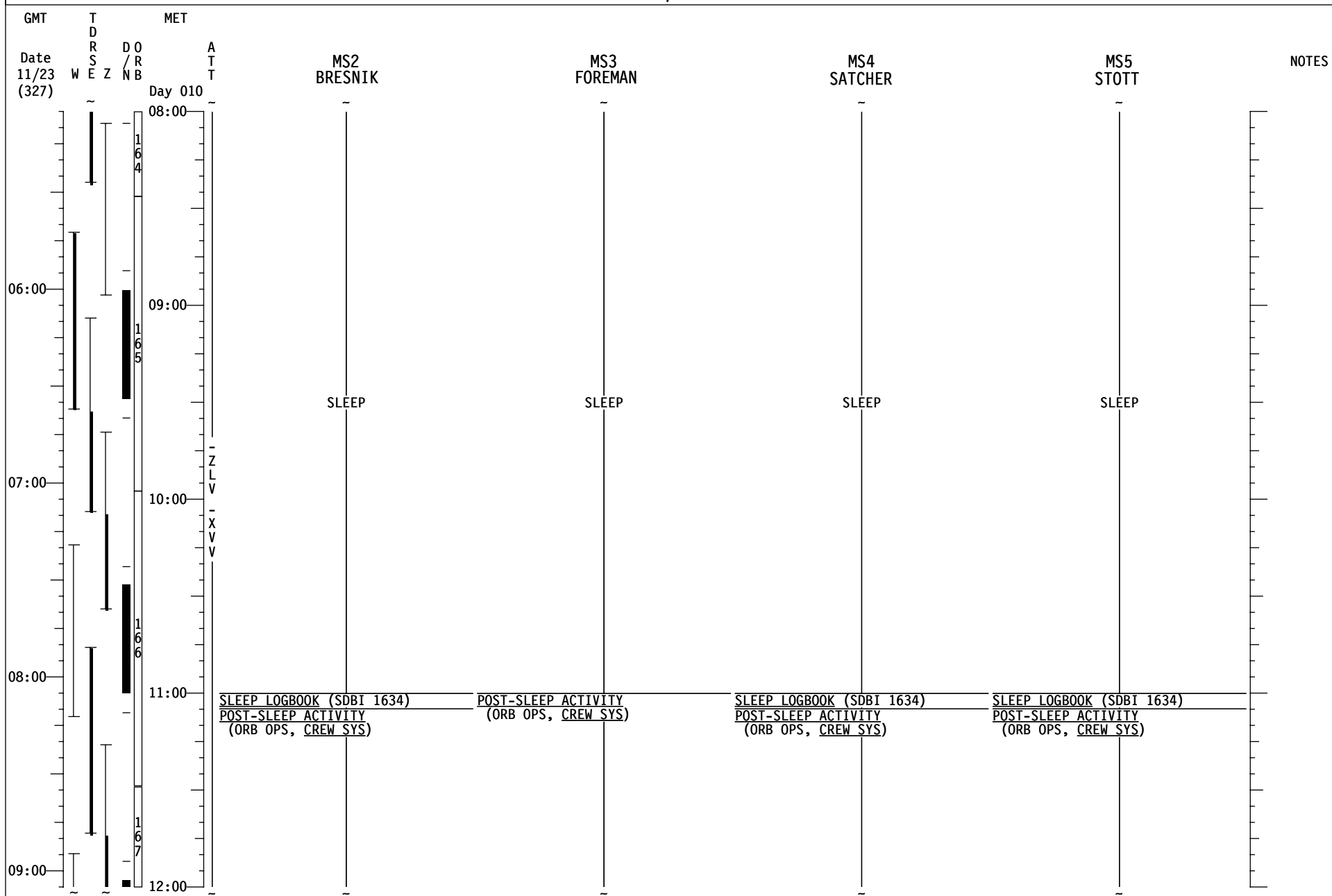
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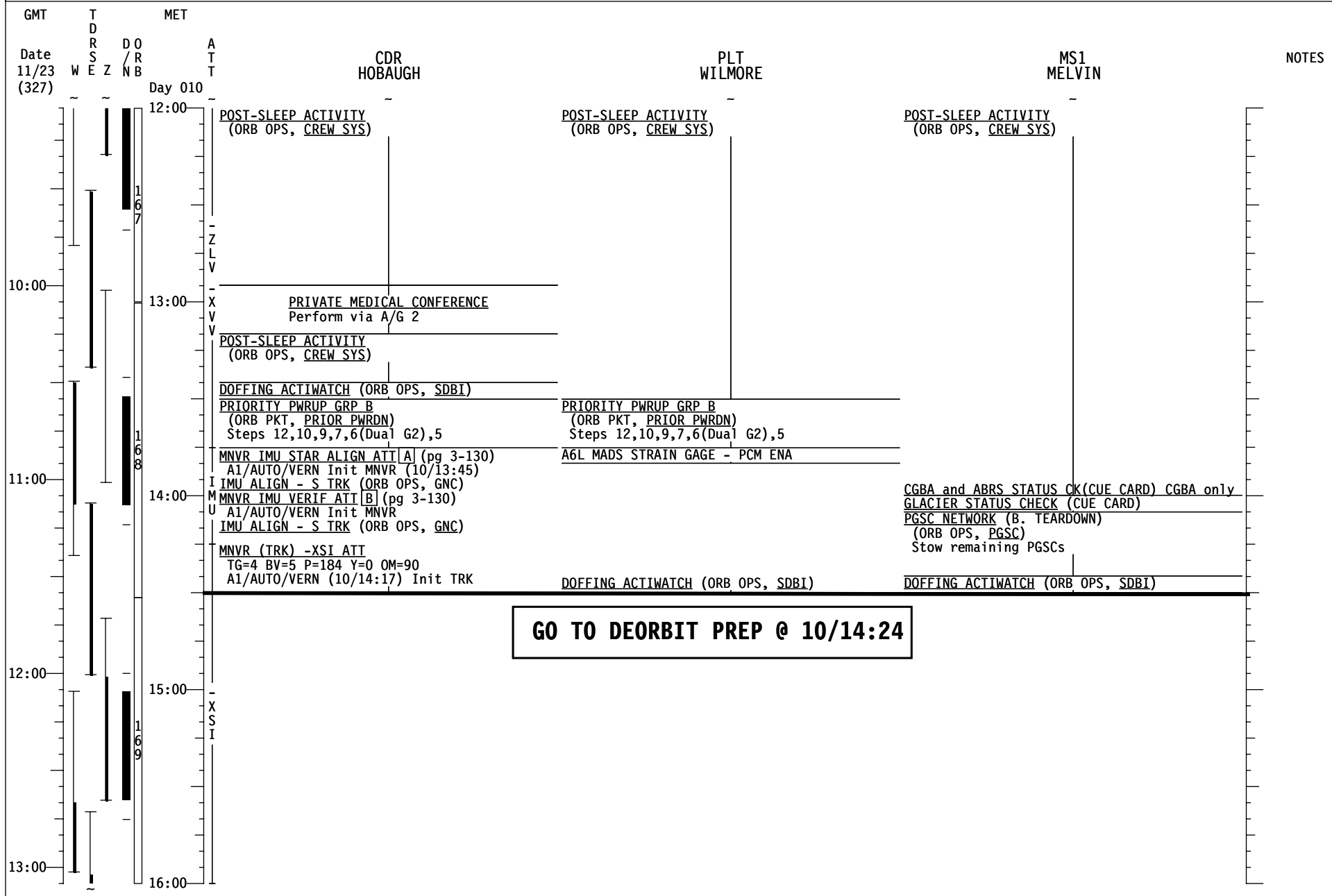
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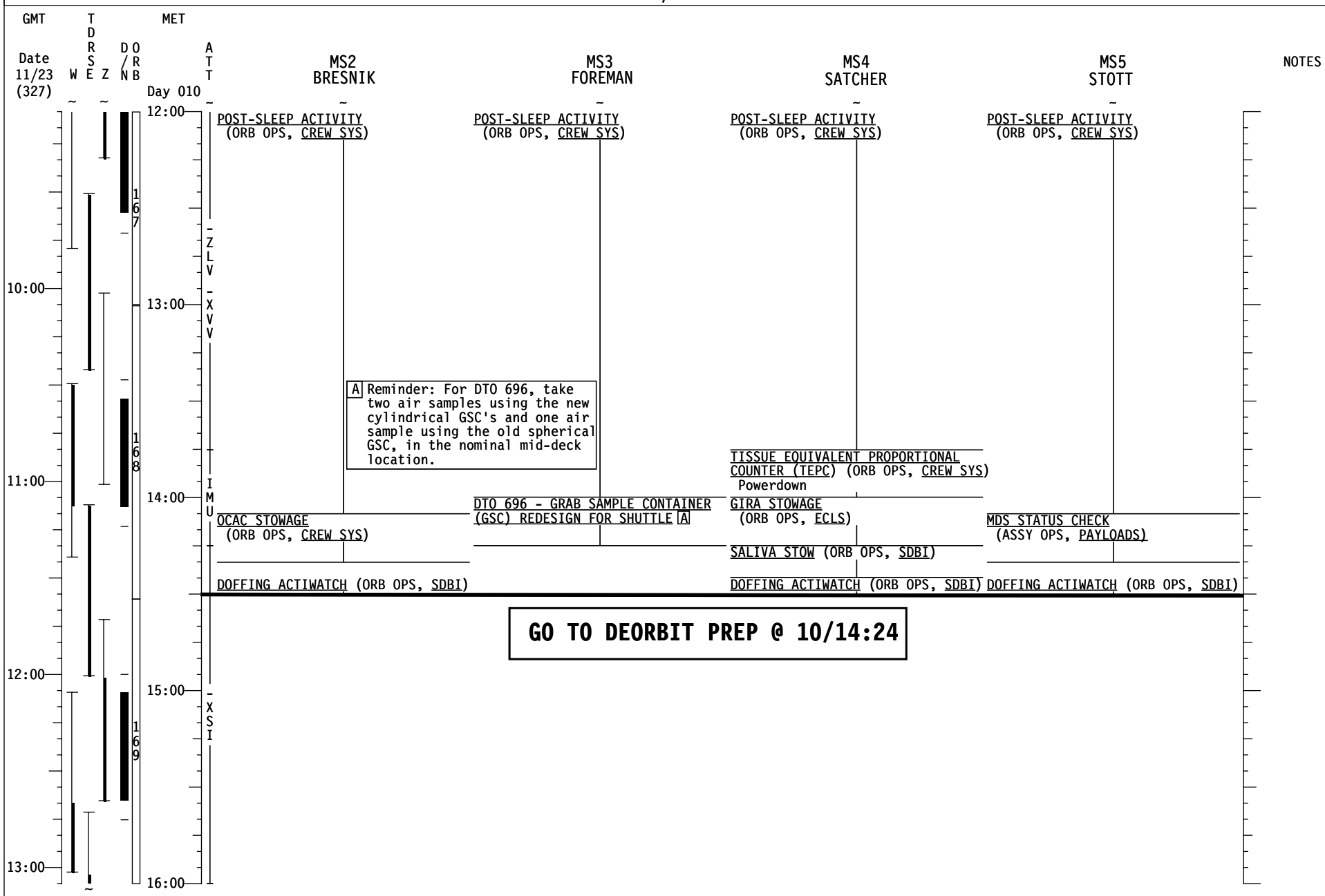
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STS-129/ULF3 FD12



STS-129/ULF3 FD12



A	IMU STAR ALIGN PAD		
ID: -Y: 57, ACAMAR MET (10/13:30 TO 10/14:19)			
-Z: 84, ALPHA ARAE MET (10/13:51 TO 10/14:44)			
ANG DIFF: 83.7			
DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 57 -Y: 84	
R 237	R 142	319	
P 149	P 166	154	
Y 33	Y 38	20	
REQD ID:			
-Y: _____, -Z: _____, ANG ERR _____, _____			
ANG:	1	2	3
ΔX	() _____	() _____	() _____
ΔY	() _____	() _____	() _____
ΔZ	() _____	() _____	() _____
EXECUTION TIME: ____/____:____:____ MET			

B	IMU VERIFICATION STAR ALIGN PAD		
ID: -Y: 39, ALHENA MET (10/13:30 TO 10/14:20)			
-Z: 47, GIENAH MET (10/13:58 TO 10/14:47)			
ANG DIFF: 89.9			
DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 39 -Y: 47	
R 184	R 99	269	
P 251	P 264	243	
Y 352	Y 345	340	
REQD ID:			
-Y: _____, -Z: _____, ANG ERR _____, _____			
ANG:	1	2	3
ΔX	() _____	() _____	() _____
ΔY	() _____	() _____	() _____
ΔZ	() _____	() _____	() _____
If any ΔX, ΔY, OR ΔZ > 0.1 Check MCC			
EXECUTION TIME: ____/____:____:____ MET			



FLIGHT PLAN

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